

Appendix A:
Air Quality, Greenhouse Gas Emissions, and Energy Supporting
Information

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Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report Palmyrita Avenue Warehouse Project City of Riverside, Riverside County, California

Project Applicant:

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AB	Assembly Bill
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/EPA Regulatory Model
APN	Assessor's Parcel Number
AQI	Air Quality Index
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AQP	Air Quality Plan
ARB	California Air Resources Board
ASF	age sensitivity factors
ATCM	Airborne Toxic Control Measure
BAU	Business as Usual
BMP	Best Management Practice
C&D	Construction and Demolition
C ² ES	Center for Climate and Energy Solutions
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Standards Code
CCAA	California Clean Air Act
CCCC	California Climate Change Center
CCS	Carbon Capture and Storage
CDC	Center for Disease Control and Prevention
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH ₄	methane
CNEL	Community Noise Equivalent Level

Acronyms and Abbreviations

CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
COA	Condition of Approval
CPF	cancer potency factor
CPUC	California Public Utility Commission
DBR	daily breathing rates
DPM	diesel particulate matter
DWR	California Department Water Resources
EIR	Environmental Impact Report
EMFAC	Emission Factors Model
EMWD	Eastern Municipal Water District
EPA	United States Environmental Protection Agency
EV	electric vehicle
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GAP	Green Accountability Performance
GHG	greenhouse gas
GWh	gigawatt hours
GWP	global warming potential
HAP	Hazardous Air Pollutant
HC	Healthy Community
HERO	Home Energy Renovation Opportunity
HFC	hydrofluorocarbon
HHD	Heavy Heavy-Duty
HHDT	Heavy Heavy-Duty Truck
HI	Hazard Index
hp	horsepower
HRA	Health Risk Assessment
HVAC	heating, ventilation, and air conditioning
HVLP	high volume low pressure
IPCC	United Nations Intergovernmental Panel on Climate Change
kBTU	kilo-British Thermal Unit
kWh	kilowatt-hour
LCFS	Low Carbon Fuel Standard
LDA	Light-Duty Auto
LDT	Light-Duty Truck
LEV	Low Emission Vehicle
LID	Low Impact Development

LST	localized significance threshold
MDAB	Mojave Desert Air Basin
MDV	Medium-Duty Vehicle
MIR	Maximally Impacted Sensitive Receptor
MM	Mitigation Measure
MMT	million metric tons
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MT	metric tons
MWh	megawatt-hour
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NF ₃	nitrogen trifluoride
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic Safety Administration
NO _x	nitrogen oxides
OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PACE	Property Assessed Clean Energy
PEV	plug-in electric vehicle
PFC	perfluorocarbon
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
pb	lead
ppb	parts per billion
ppm	parts per million
REL	Reference Exposure Level
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RPU	Riverside Public Utilities
RTP/SCS	Regional Transportation Plan and Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Government
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan

Acronyms and Abbreviations

SLCP	Short-Lived Climate Pollutant
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SO _x	sulfur oxides
SP	service population
SSAB	Salton Sea Air Basin
TAC	toxic air contaminant
TDM	Transportation Demand Management
TRU	Transport Refrigeration Unit
URBEMIS	Urban Emissions Model
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
VOC	volatile organic compound
WRCOG	Western Riverside Council of Governments
ZEV	Zero-Emission Vehicle

SECTION 1: INTRODUCTION

1.1 - Purpose and Methods of Analysis

This Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from construction and/or operation of the proposed Palmyrita Avenue Warehouse Project (proposed project) would cause significant impacts to air resources in the project area. The respective analyses were conducted within the context of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] § 21000, *et seq.*). The analysis methodology follows the South Coast Air Quality Management District (SCAQMD) and City of Riverside recommendations for the quantification of emissions and evaluation of potential impacts on air resources.

1.2 - Project Summary

1.2.1 - Site Location

The proposed project is located in the City of Riverside, in Riverside County, California.

The approximately 13.60-acre project site is located at 1151 Palmyrita Avenue, which is situated on the north side of Palmyrita Avenue and east of Iowa Avenue, corresponding to Assessor's Parcel Numbers (APNs) 247-170-030 and -039 (Exhibit 2). The project site is bounded to the east by railroad tracks; Palmyrita Avenue to the south; Iowa Avenue to the west; and railroad tracks, large warehouse, and a vacant lot to the north. The project site is currently used for a small-scale manufacturing facility occupied by BarretteWood USA and Barrette Outdoor Living in an existing warehouse building on the west side of the project site.

1.2.2 - Project Description

The project site is currently used as a warehouse with paved parking areas. The existing warehouse currently occupying the project site would be demolished as part of the proposed project.

The project applicant, Dedeaux Properties, Inc., proposes to construct two new warehouse buildings (Building 1 and Building 2) on an approximately 13.60-acre site (Assessor's Parcel Numbers [APNs] 247-170-030 and -039). The proposed project would analyze construction of the warehouse buildings under two scenarios: Scenario 1—a 100 percent warehousing scenario, and Scenario 2—a 75 percent warehousing and 25 percent manufacturing scenario. Additionally, off-site work would be included as part of both scenarios, including approximately 0.56 acre of frontage improvements, including a raised median island within Iowa Avenue (0.04 acre), as well as landscaping and sidewalks (0.47 acre), and driveways along the project site's frontage (0.05 acre).

1.2.3 - Scenario 1

Under Scenario 1 (Exhibit 3a), Building 1 would total 139,667 square feet, and consist of a 132,167-square-foot warehouse, 4,000-square-foot first floor office, and a 3,500-square-foot second floor

office. Building 1 would include 125 standard parking stalls, four Americans with Disabilities Act (ADA) standard stalls, two ADA van stalls, one electric vehicle (EV) ADA standard stall, one EV ADA van stall, 16 EV standard stalls, three Clean Air/Vanpool/EV stalls, and 10 parallel parking stalls, for a total of 162 parking stalls.

Building 2 would total 126,091 square feet, and consist of a 116,691-square-foot warehouse, 5,000-square-foot first floor office, and a 4,400-square-foot second floor office. Building 2 would include 126 standard parking stalls, four ADA standard stalls, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and five Clean Air/Vanpool/EV stalls, for a total of 155 stalls. The square footage of both buildings would total 265,758 square feet, with combined parking of 317 parking stalls. Building 2 would include 15 trailer parking stalls.

1.2.4 - Scenario 2

Under Scenario 2 (Exhibit 3b), Building 1 would total 122,315 square feet, and consist of a 88,736-square-foot warehouse with 30,579 square feet of manufacturing uses and a 3,000-square-foot first floor office. Building 1 would include 168 standard parking stalls, four ADA, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and three Clean Air/Vanpool/EV stalls, for a total of 195 stalls.

Building 2 would total 122,127 square feet, and consist of 88,595-square-foot warehouse with 30,532 square feet of manufacturing uses and a 3,000-square-foot first floor office. Building 2 would include 159 standard parking stalls, four ADA, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and five Clean Air/Vanpool/EV stalls, for a total of 188 stalls. The square footage of both buildings would total 244,442 square feet, with combined parking of 383 parking stalls.

Circulation

Access to the site would be provided via two driveways, one 40-foot-wide driveway and one 30-foot-wide driveway along Palmyrita Avenue, and one 35-foot-wide driveway along Iowa Avenue.

The main freight truck entrance/exit to the proposed warehouse would be from Palmyrita Avenue; the main passenger vehicle entrance would be from Iowa Avenue. It is conservatively assumed the building would operate 24 hours a day, 7 days per week, with the exception of some holidays. The proposed project is anticipated to employ no more than 236 employees. The proposed project would include roadway and frontage improvements along Palmyrita Avenue and Iowa Avenue, as well as the construction of a raised median along Iowa Avenue. Improvements to Palmyrita Avenue and Iowa Avenue would total approximately 0.56 acre.

1.2.5 - Water Quality Management Plan

The proposed project would include two Low Impact Development (LID) Best Management Practice (BMP), generally one each for Building 1 and Building 2, along with CDS clarifiers for pre-treatment. Each bioretention/biotreatment system would be situated west of each building and would capture and treat runoff from the project site.

The proposed project would also implement source control BMPs to mitigate potential runoff pollutants from landscaping/outdoor pesticide use, refuse areas, condensate drain lines, and plazas, sidewalks, loading docks and parking lots. Proposed source control BMPs include permanent structural BMPs such as implementing landscaping which maximizes groundcover and promotes infiltration, minimizes use of fertilizers and utilizes plants that are tolerant of saturated soil conditions. Refuse areas will be maintained and emptied by a qualified contracted waste management company, or the City. Equipment condensate lines would drain to the sanitary sewer. Operational source control BMPs include the proper disposal of green waste from landscaping maintenance and the provision of Pest Management Information, regular inspection and maintenance of refuse receptacles, and regular sweeping of plazas, sidewalks, and parking lots to prevent debris from entering the storm drain system.

1.2.6 - Landscaping

The proposed project would include 84,581 square feet of landscaping under Scenario 1 and 104,694 square feet of landscaping under Scenario 2. Landscaped areas would occur around the perimeter of the site and throughout the parking areas. Landscaping would consist of a variety of trees, shrubs, and groundcover, including blue palo verde, desert willow, chitalpa, Canary Island pine, Chinese pistache, coast live oak, African sumac, Brisbane box, street trees, pineapple guava, dwarf bottle brush, silverleaf cassia, dwarf dianella, dianella, fortnight lily, Texas Privet, rosemary, autumn sage, Mexican sage, coast rosemary, dwarf coast rosemary, blue flame agave, blue glow agave, coral aloe, red yucca, dwarf acacia, dwarf coyote bush, prostrate natal plum, and prostrate rosemary. Landscaping for the proposed project would be designed in accordance with the State mandated Assembly Bill (AB) 1881 Water Efficient Landscape Ordinance and the City of Riverside Municipal Code Chapter 19.570–Water Efficient Landscaping and Irrigation.^{1,2}

1.2.7 - Building Elevations and Design

The maximum building height of the proposed buildings would be 42 feet for Scenario 1 and 41 feet for Scenario 2. Buildings would be composed of tilt-up concrete material, with blue glass, medal cladding, clear anodized mullions, and include muted earth tones such as bronze, white, gray, and beige. The design of the proposed project would be consistent with the Riverside Citywide Design Guidelines³ and Good Neighbor Guidelines for Industrial Facilities.⁴ Rooftop mechanical units, including heating, ventilation, and air conditioning (HVAC) systems, would be screened away from public view from adjacent streets.

¹ California Department of Water Resources (DWR). 2023. Model Water Efficiency Landscape Ordinance. Website: <https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance>. Accessed January 18, 2023.

² City of Riverside. 2022. City of Riverside Code of Ordinances, Chapter 19.570 Water Efficient Landscaping and Irrigation.

³ City of Riverside. 2019. Riverside Citywide Design Guidelines. Website: https://riversideca.gov/cedd/sites/riversideca.gov.icedd/files/pdf/planning/Citywide_Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf. Accessed February 10, 2023.

⁴ City of Riverside. 2020. Good Neighbor Guidelines for Industrial Facilities. Website: <https://riversideca.gov/cedd/sites/riversideca.gov.icedd/files/pdf/planning/2021/Good%20Neighbor%20Guidelines.pdf>. Accessed February 10, 2023.

1.2.8 - Walls/Fences

The proposed project would include a retaining wall at the southwest, northwest, and southeast portions of the site, as well as within some portions of the site. This retaining wall would be 3 feet tall when visible from the public right-of-way and 6 feet tall when not visible from the public right-of-way. An 8-foot-tall tubular steel fence is proposed along the northern portion of the site, which would screen the proposed project from the existing railroad tracks adjacent to the site. A 14-foot-tall tilt up concrete screen wall is proposed at the northeast corner of the site, along with an 8-foot-tall tilt up concrete screen wall to the east, adjacent to the railroad tracks that abut the site to the east. In addition to the 8-foot-tall concrete screen wall, 14-foot-tall landscaping would further screen the site from the adjacent railroad.

8-foot-tall metal gates would also be located within the site to provide controlled access to various areas of the project.

1.2.9 - Outdoor Storage of Trucks and Screening

As mentioned above, a mix of fencing, walls, and landscaping would be located around the site perimeter to screen the proposed project from the adjacent roadways and railroad.

1.2.10 - Phasing and Construction

The following construction schedule was assumed for the purposes of this environmental analysis. The proposed project would be constructed in a single phase beginning fourth quarter 2023. Demolition and grading would occur within the first month of construction, and the proposed project is expected to be operational in the third quarter of 2024.

1.2.11 - Operation

The future warehouse tenant is unknown at this time. The proposed project is intended to be used primarily for the storage and/or consolidation of goods prior to their distribution to the customer or another supporting facility. The site would operate 24-hours a day, 365 days per year. Cold storage is not proposed as part of the project.

1.3 - Summary of Analysis Results

The following is a summary of the analysis results. Please refer to Section 5, Air Quality Impact Analysis; Section 6, Greenhouse Gas Impact Analysis; and Section 7, Energy Impact Analysis, which provide the comprehensive analysis in support of the findings and conclusion of significance.

Impact AIR-1 The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

Less than significant impact.

Impact AIR-2 The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Less than significant impact.

Impact AIR-3 The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Less than significant impact.

Impact AIR-4 The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Less than significant impact.

Impact GHG-1 The proposed project would generate direct and indirect greenhouse gas emissions; however, these impacts would not result in a significant impact on the environment.

Less than significant impact.

Impact GHG-2 The proposed project could conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHG.

Less than significant impact with mitigation incorporated.

Impact ENER-1 The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.

Less than significant impact.

Impact ENER-2 The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Less than significant impact.

1.4 - Standard Design Measures Applied to the Proposed Project

Air Quality

The applicable air quality standard design measures (SDM) are listed below.

No project-specific air quality mitigation measures were required to reduce potential impacts to less than significant; however, standard air quality design measures identified in the City of Riverside General Plan Environmental Impact Report (EIR) would apply to the proposed project.

Applicable General Plan EIR Standard Design Measures

- SDM Air 1** To mitigate for potential adverse impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available Urban Emissions (URBEMIS) model, or other methods sanctioned by the South Coast Air Quality Management District (SCAQMD). The analysis of construction-related air quality impacts shall be included in the development project's CEQA analysis, including recommended mitigation measures. Proposed mitigation measures may include extending the construction period as feasible in order to ensure air quality thresholds are not exceeded. The analysis shall address pollution levels near sensitive receptors and require mitigation to reduce emissions.
- SDM Air 2** To mitigate for potential adverse impacts resulting from construction activities, development projects must abide by the South Coast Air Quality Management District (SCAQMD) Rule 403 concerning Best Management Practices (BMPs) for construction sites in order to reduce emissions during the construction phase. Measures may include:
- Development of a construction traffic management program that includes, but is not limited to, rerouting construction-related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site;
 - Sweep streets at the end of the day if visible soil material is carried onto adjacent paved public roads;
 - Wash off trucks and other equipment leaving the site;
 - Replace ground cover in disturbed areas immediately after construction;
 - Keep disturbed/loose soil moist at all times;
 - Suspend all grading activities when wind speeds exceed 25 miles per hour;
 - Enforce a 15-mile per hour speed limit on unpaved portions of the construction site.
- SDM Air 4** To reduce diesel emissions associated with construction, construction contractors shall provide temporary electricity to the site to eliminate the need for diesel-powered electric generators, or provide evidence that electrical hook ups at construction sites are not cost effective or feasible.
- SDM Air 5** To reduce construction-related particulate matter air quality impacts of City projects, the following measures shall be required:
1. The generation of dust shall be controlled as required by the South Coast Air Quality Management District (SCAQMD).
 2. Grading activities shall cease during periods of high winds (greater than 25 mph).
 3. Trucks hauling soil, dirt or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the City Engineer.

4. The contractor shall prepare and maintain a traffic control plan, prepared, stamped and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with Chapter 5 of the latest edition of the Caltrans Traffic Manual and the State Standard Specifications. The plan shall be submitted for approval by the engineer at the preconstruction meeting. Work shall not commence without an approved traffic control plan.

The following mitigation measures shall be implemented to address long-term operational impacts:

SDM Air 7 As part of the CEQA process, the City shall require proposed development projects with potential operational air quality impacts to identify and mitigate those impacts. To ensure proper characterization and mitigation of those impacts, regional impacts shall be analyzed using the latest available Urban Emissions (URBEMIS) model, or other analytical method determined in conjunction with the South Coast Air Quality Management District (SCAQMD). To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, carbon monoxide (CO) Hot Spot analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation. Mitigation should reduce identified impacts to the maximum extent feasible using, among others, measures identified in the Air Quality Element Policies of the General Plan and the most recent Air Quality Management Plan (AQMP) as well as mitigation from the most recent CEQA Air Quality Handbook available at the SCAQMD. Example topics include, but are not limited to, energy conservation, reduction of Vehicle Miles Traveled (VMT), overall trip reduction, and reduction of particulate matter.

1.5 - Mitigation Measures Applied to the Proposed Project

Air Quality

No mitigation required.

Greenhouse Gas Emissions

Project-specific Mitigation Measures

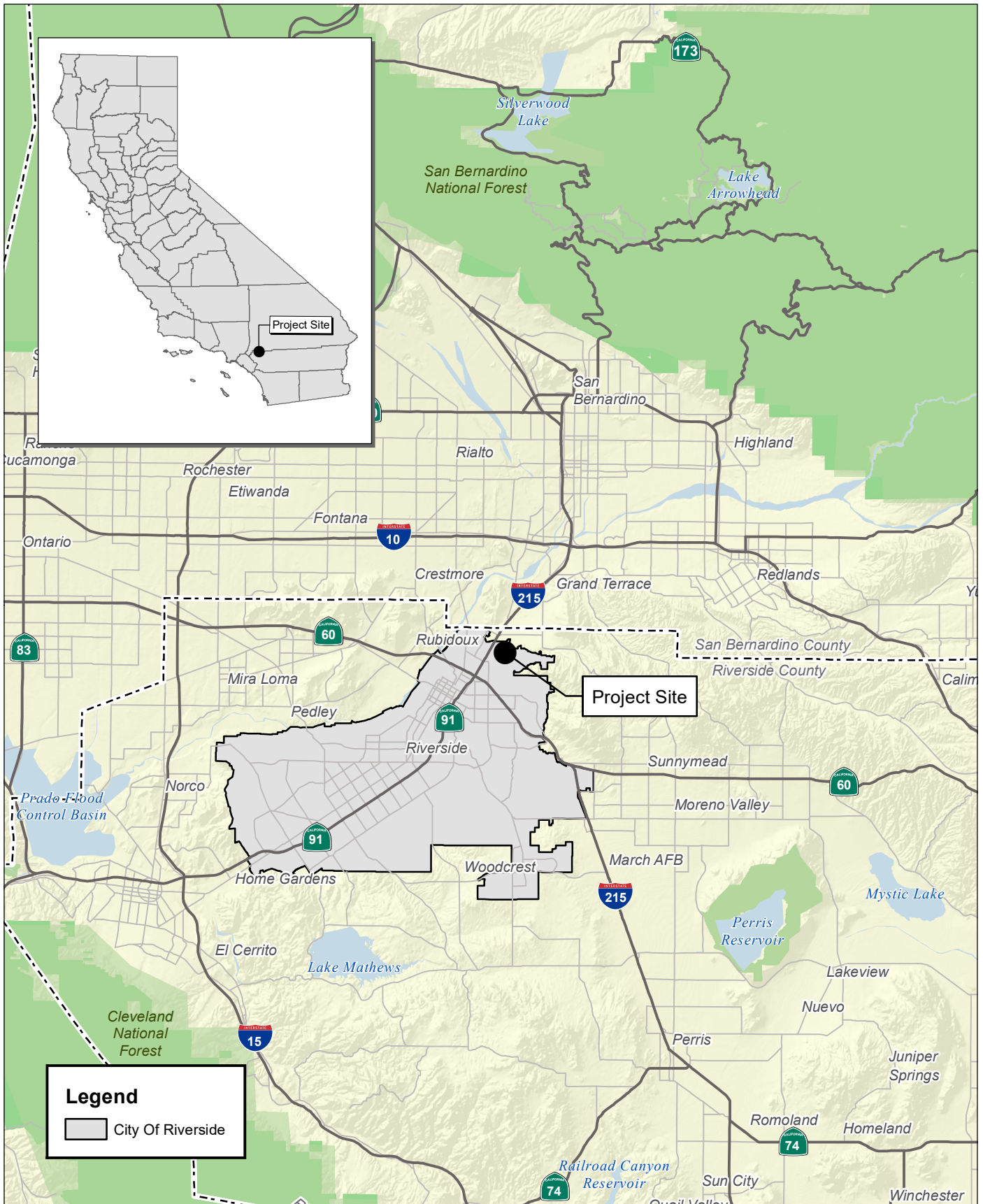
MM GHG-2 Zero-Emission Service Equipment

Prior to issuance of a construction permit the project applicant shall demonstrate to the City of Riverside that all on-site off-road and on-road service equipment would utilize zero-emission technology. Additionally, the project applicant shall provide documentation to the City of Riverside that all proposed buildings would be designed to include electric outlets to support the use of all-electric or zero-emission on-site service equipment.

Energy

No mitigation required.

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Source: Census 2000 Data, The California Information Library (CaSIL).

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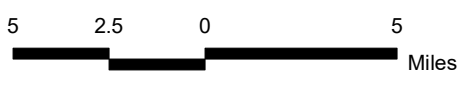


Exhibit 1 Regional Location Map

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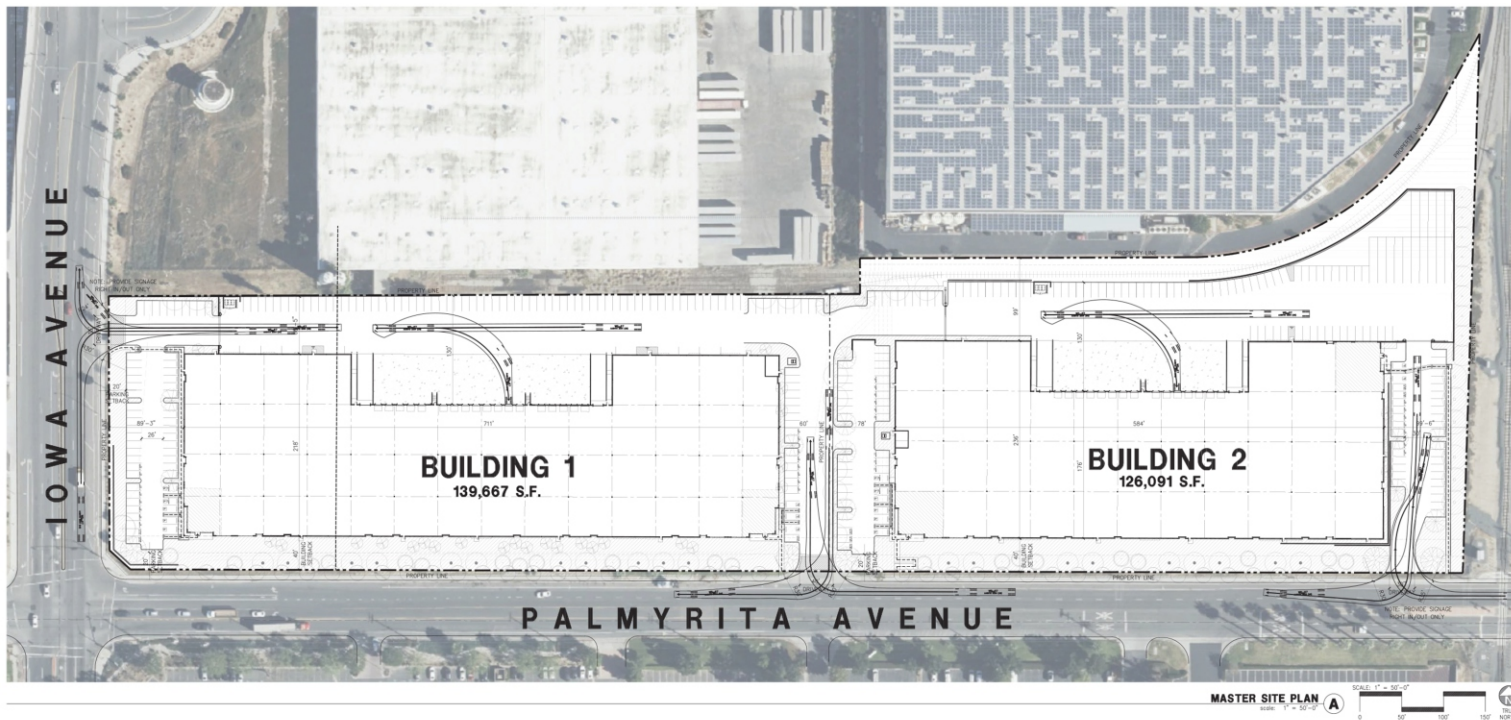
Source: Bing Aerial Imagery.

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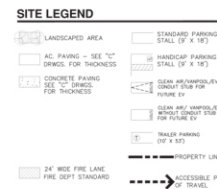
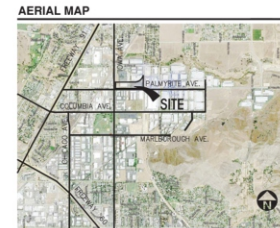
Exhibit 2 Local Vicinity Map

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TABULATION

	BUILD 1	BUILD 2	TOTAL
AREAS			
Office	282,614	310,000	592,614 S.F.
Warehouse	6,500	7,700	14,200 S.F.
BASEMENTS			
Office - 1st Floor	4,500	6,000	10,500 S.F.
Office - 2nd Floor	5,500	4,400	9,900 S.F.
Warehouse	100,000	100,000	200,000 S.F.
TOTAL	198,614	238,100	436,714 S.F.
COVERAGES			
Auto Parking Required	30	30	60
Office 100% (1)	110	117	227
TOTAL	140	167	307
Auto Parking Provided			
Standard (1' x 1.5')	105	100	205
Accessible Standard (1' x 1.5')	4	4	8
Accessible Van (1' x 1.5')	2	2	4
Handicap Standard (1' x 1.5')	1	1	2
Handicap Van (1' x 1.5')	1	1	2
Clear Access (1' x 1.5')	16	16	32
Clear Access (1' x 1.5')	3	3	6
TOTAL	138	137	275
TOTAL PARKING PROVIDED	138	137	275
CONCRETE PAVING			
Office 100% (1)	110	117	227
TOTAL	110	117	227



PROPERTY OWNER
DEDEAUX PROPERTIES
100 WILSON BLVD. SUITE 200
SANTA MONICA, CA 90401
CONTACT: BENJAMIN HORNING
PHONE: 310-991-8228

ADDRESS OF THE PROPERTY
NORTHEAST CORNER OF IOWA AVE AND PALMYRITA AVENUE

ASSESSOR'S PARCEL NUMBER
024-170-030
0247-170-030

SCOPE OF WORK
(1) INDUSTRIAL BUILDING TOTALING APPROXIMATELY 265,758 SF ON APPROXIMATELY 13.83 ACRES OF LAND.

ZONING
BUSINESS AND MANUFACTURING PARK (BMP)

ADJACENT USES
BUSINESS AND MANUFACTURING PARK (BMP) ON ALL SIDES

APPLICANT
DEDEAUX PROPERTIES
100 WILSON BLVD. SUITE 200
SANTA MONICA, CA 90401
CONTACT: BENJAMIN HORNING
PHONE: 310-991-8228

APPLICANT'S REPRESENTATIVE
HPA, INC.
18251 BARDEN AVE. SUITE 100
REVILLE, CA 92512
TEL: 949-863-1700
ATtn: BRUCE KIM

Source: HPA, Inc. 02/10/2023.

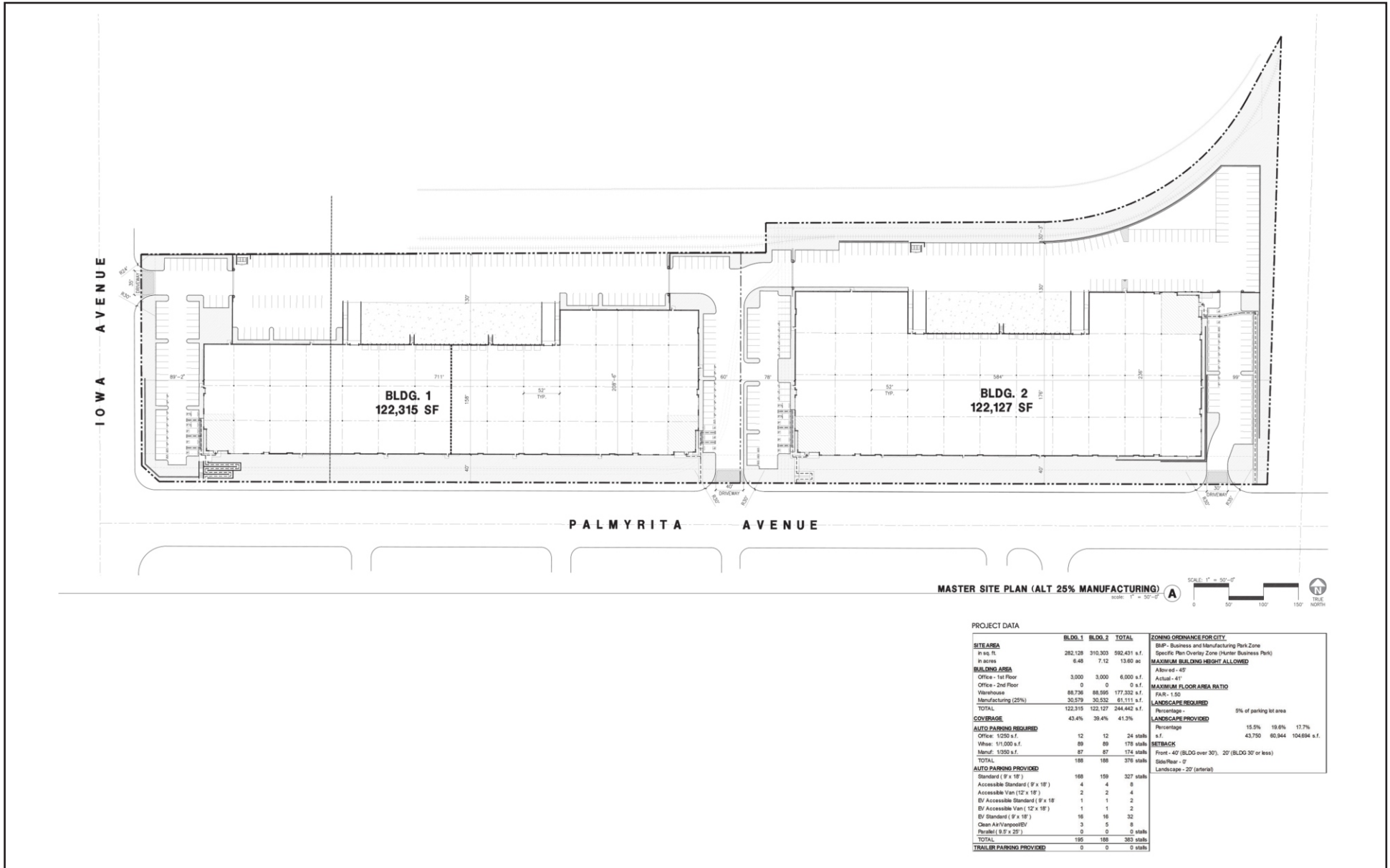


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Exhibit 3a Scenario 1 Site Plan - 100% Warehouse

DEDEAUX PROPERTIES, INC.
PALMYRITA AVENUE WAREHOUSE PROJECT
AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY ANALYSIS REPORT

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PROJECT DATA			ZONING ORDINANCE FOR CITY			
SITE AREA	BLDG. 1	BLDG. 2	TOTAL	BMP - Business and Manufacturing Park Zone		
in sq. ft.	262,128	310,303	592,431 s.f.	Specific Plan Overlay Zone (Harris Business Park)		
in acres	6.48	7.12	13.60 ac	MAXIMUM BUILDING HEIGHT ALLOWED		
BUILDING AREA				Allowed - 47'		
Office - 1st Floor	3,000	3,000	6,000 s.f.	Actual - 41'		
Office - 2nd Floor	0	0	0 s.f.	MAXIMUM FLOOR AREA RATIO		
Warehouse	88,736	88,595	177,332 s.f.	FAR - 1.50		
Manufacturing (25%)	30,576	30,532	61,111 s.f.	LANDSCAPE REQUIRED		
TOTAL	122,315	122,127	244,442 s.f.	Percentage -	LANDSCAPE PROVIDED	
COVERAGE	43.4%	39.4%	41.3%	Percentage -	9% of parking lot area	
AUTO PARKING REQUIRED				Percentage	15.5%	19.6%
Office - 1250 s.f.	12	12	24 stalls			
Whee - 1/1,000 s.f.	89	89	178 stalls	SETBACK	43,750 60,944 104,694 s.f.	
Manuf. - 1/500 s.f.	87	87	174 stalls	Front - 40' (BLDG over 30'), 20' (BLDG 30' or less)		
TOTAL	188	188	376 stalls	Side/Rear - 0'		
AUTO PARKING PROVIDED				Landscape - 20' (arterial)		
Standard (9' x 18')	168	159	327 stalls			
Accessible Standard (9' x 18')	4	4	8			
Accessible Van (12' x 16')	2	2	4			
EV Accessible Standard (9' x 18')	1	1	2			
EV Accessible Van (12' x 16')	1	1	2			
EV Standard (9' x 18')	16	16	32			
Clean Air/VaporoolEV	3	5	8			
Portable (9' x 25')	0	0	0 stalls			
TOTAL	195	188	383 stalls			
TRAILER PARKING PROVIDED	0	0	0 stalls			

Source: HPA, Inc. 02/10/2023.



Exhibit 3b

Scenario 2 Site Plan - 75% Warehouse and 25% Manufacturing

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SECTION 2: AIR QUALITY SETTING

2.1 - Environmental Setting

The proposed project is located in the City of Riverside, California, situated in the South Coast Air Basin (SoCAB) which is a part of the SCAQMD. Regional air quality and local air quality are impacted by topography, dominant airflows, atmospheric inversions, location, and season. The following section describes these conditions as they pertain to the SoCAB.

2.1.1 - South Coast Air Basin

The proposed project is within the SoCAB. To the west of the basin is the Pacific Ocean. To the north and east of the basin are the San Gabriel, San Bernardino, and San Jacinto mountains, while the southern limit of the basin is the San Diego County line. The basin consists of Orange County, all of Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The air quality in the basin is impacted by dominant airflows, topography, atmospheric inversions, location, season, and time of day.

Regional climate factors such as temperature, wind, humidity, precipitation, and amount of sunshine have a substantial influence on air quality in the SoCAB. The annual average temperatures throughout the SoCAB vary from the low to middle 60°F (degrees Fahrenheit). Because of a decreased marine influence, the eastern portion of the SoCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SoCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SoCAB have recorded maximum temperatures above 100°F.

Although the climate of the SoCAB can be characterized as semi-arid, the air near the land surface is relatively humid on most days because of the presence of a marine layer from the Pacific Ocean. This shallow layer of sea air is an important modifier of SoCAB climate. Humidity restricts visibility in the SoCAB and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SoCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature of the coastal areas. These effects decrease with distance from the coast.

More than 90 percent of the SoCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SoCAB, with frequency being higher near the coast.

The topography and climate of Southern California combine to make the SoCAB an area of high air pollution potential. A warm air mass frequently descends over the cool, moist marine layer produced

by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground. Light winds can further limit ventilation. Additionally, abundant sunlight triggers the photochemical reactions which produce ozone and the majority of the particulate matter.⁵

2.2 - Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards that are, in some cases, more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants.

2.2.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants and listed below) are addressed in the Clean Air Act. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Another set of limits intended to prevent environmental and property damage are called secondary standards.⁶ The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone (O₃)
- Nitrogen dioxide (NO₂)
- Lead (Pb)
- Particulate matter (PM₁₀ and PM_{2.5})
- Carbon monoxide (CO)
- Sulfur dioxide (SO₂)

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants.

2.2.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the Federal Clean Air Act at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The California Air Resources Board (ARB) administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The

⁵ South Coast Air Quality Management District (SCAQMD). 2017. Final 2016 Air Quality Management Plan.

⁶ United States Environmental Protection Agency (EPA). 2016. NAAQS Table. December 20. Website: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed October 20, 2022.

10 State air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride.

2.2.3 - Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate Hazardous Air Pollutants (HAPs). Section 112 of the Clean Air Act lists 187 HAPs to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. The ARB and local air districts regulate TACs and HAPs in California.

The California Almanac of Emissions and Air Quality—2013 edition presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data.⁷ The 10 TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.⁸ In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances.

2.2.4 - Air Pollutant Description and Health Effects

The federal and State ambient air quality standards, relevant effects, properties, and sources of the air pollutants are summarized in Table 1.

⁷ California Air Resources Board (ARB). 2013. The California Almanac of Emissions and Air Quality—2013 Edition. Website: <https://ww2.arb.ca.gov/our-work/programs/almanac-emissions-air-quality/about>. Accessed October 24, 2022.

⁸ California Air Resources Board (ARB). 1998. The Report on Diesel Exhaust. Website: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/de-fnds.htm>. Accessed October 24, 2022.

Table 1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources																
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds (VOCs), nitrogen oxides (NO _x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind. Hot, sunny, and calm weather conditions are favorable to ozone formation.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (on-road and off-road vehicle exhaust).																
	8 Hours	0.070 ppm	0.070 ppm ^f				CO	1 Hour	20 ppm	35 ppm	Ranges depend on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood-burning, and natural sources.	8 Hours	9.0 ppm	9 ppm	NO ₂ ^b	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in PM-related health effects.
CO	1 Hour	20 ppm	35 ppm	Ranges depend on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood-burning, and natural sources.																
	8 Hours	9.0 ppm	9 ppm				NO ₂ ^b	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO ₂ forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Annual	0.030 ppm	0.053 ppm						
NO ₂ ^b	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO ₂ forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.																
	Annual	0.030 ppm	0.053 ppm																			

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
SO ₂ ^c	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO ₂ levels. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.	SO ₂ is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor like rotten eggs. Sulfur oxides (SO _x) include SO ₂ and sulfur trioxide. Sulfuric acid is formed from SO ₂ , which can lead to acid deposition and can harm natural resources and materials. Although SO ₂ concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because SO ₂ is a precursor to sulfate and PM ₁₀ .	Human caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of SO ₂ . The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. SO ₂ is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The SO ₂ levels in the State are well below the maximum standards.
	3 Hours	—	0.5 ppm			
	24 Hours	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM ₁₀)	24 hours	50 µg/m ³	150 µg/m ³	<ul style="list-style-type: none"> Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death. 	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m ³	—			
Particulate matter (PM _{2.5})	24 Hours	—	35 µg/m ³			
	Annual	12 µg/m ³	12 µg/m ³			
Visibility-reducing particles	8 Hours	See note below ^d				

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hours	25 µg/m ³	—	Decrease in ventilatory function; aggravation of asthmatic symptoms; aggravation of cardiopulmonary disease; vegetation damage; degradation of visibility; and property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO ₄ ²⁻ . Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of SO ₂ . In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead ^e	30 days	1.5 µg/m ³	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m ³			
	Rolling 3-month average	—	0.15 µg/m ³			
Vinyl chloride ^e	24 Hours	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the ARB identified vinyl chloride as a TAC and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application-sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
VOC		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified TACs.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, lightheadedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, several which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
<p>Notes:</p> <p>µg/m³ = micrograms per cubic meter 30-day = 30-day average Annual = Annual Arithmetic Mean ppm = parts per million (concentration) Quarter = Calendar quarter</p> <p>^a Federal standard refers to the primary NAAQS, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO₂, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>^b To attain the 1-hour NO₂ national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb) (0.100 ppm).</p> <p>^c On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>^d Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the Statewide and Lake Tahoe Air Basin standards, respectively.</p> <p>^e The ARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>^f The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015, and became effective on December 28, 2015.</p> <p>^g The official level of the 1-hour NO₂ standard is 100 ppb, equal to 0.100 ppm, which is shown here for the purpose of clearer comparison to the other standards.</p> <p>Source of effects, properties, and sources: United States Environmental Protection Agency (EPA). 2003. Particle Pollution and your Health. EPA-452/F-03-001. September. United States Environmental Protection Agency (EPA). 2009. Ozone and your Health EPA-456/F-09-001. United States Environmental Protection Agency (EPA). 2009. Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide. July. United States Environmental Protection Agency (EPA). 2010. Technology Transfer Network, Air Toxics Website. Page updated December 21, 2018. Health Effects Notebook for Hazardous Air Pollutants. December. Website: https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants. Accessed October 24, 2022. National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. June 10. Benzene. National Toxicology Program. 2016. Report on Carcinogens, Fourteenth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. California Environmental Protection Agency (Cal/EPA). 2002. Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. California Air Resources Board (ARB). 2009. Vinyl Chloride. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed October 24, 2022. United States Environmental Protection Agency (EPA). 2017. Indoor Air Quality. Sources of Indoor Air Pollution—Organic Gases (Volatile Organic Compounds—VOCs). November. Website: www.epa.gov/iaq/voc.html. Accessed October 24, 2022. National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Source of standards: South Coast Air Quality Management District (SCAQMD). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. February. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-qaqs-feb2016.pdf?sfvrsn=2. Accessed October 24, 2022.</p>						

Several pollutants listed in Table 1 are not addressed in this analysis. An analysis of lead is not included in this report because the proposed project would not generate a new source of lead emissions. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed under the analysis for PM₁₀ and PM_{2.5}. No components of the proposed project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity; therefore, these compounds are not further evaluated in this report.

Toxic Air Contaminants Health Effects

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate HAPs. Section 112 of the Clean Air Act lists 187 HAPs to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. The ARB and local air districts regulate TACs and HAPs in California.

The 2013 Edition of the California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data.⁹ The 10 TACs are acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Several studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk.¹⁰ In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

Asbestos

Asbestos is the name given to several naturally occurring fibrous silicate minerals that have been mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the

⁹ California Air Resources Board (ARB). 2013. The California Almanac of Emissions and Air Quality—2013 Edition. Website: <https://ww2.arb.ca.gov/our-work/programs/almanac-emissions-air-quality/about>. Accessed October 24, 2022.

¹⁰ California Air Resources Board (ARB). 1998. The Report on Diesel Exhaust Website: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/de-fnds.htm>. Accessed October 24, 2022.

lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. No naturally occurring asbestos is located near the project site.¹¹

2.3 - Existing Air Quality Conditions

2.3.1 - Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or “form,” of what constitutes attainment based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the 3-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

The current attainment designations for the SoCAB are shown in Table 2. With respect to the CAAQS, the Riverside County portion of the SoCAB is nonattainment for ozone, PM₁₀, and PM_{2.5} and attainment or unclassified for all other pollutants. With respect to the NAAQS, the Riverside County portion of the SoCAB is nonattainment for ozone and PM_{2.5} and attainment or unclassified for all other pollutants.

Table 2: South Coast Air Basin Attainment Status

Pollutant	State Status ¹	National Status ²
Ozone (1-hour) ^a	Nonattainment	Nonattainment (Extreme)
Ozone (8-hours)	Nonattainment	Nonattainment (Extreme)
Carbon monoxide	Attainment	Attainment (Maintenance)
Nitrogen dioxide (annual)	Attainment	Attainment (Maintenance)
Nitrogen dioxide (1-hour)	Attainment	Unclassifiable/Attainment
Sulfur dioxide	Attainment	Unclassified/Attainment
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment (Serious)
Lead (Riverside County)	—	Attainment

¹¹ California Department of Conservation, Division of Mine Reclamation. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos.

Pollutant	State Status ¹	National Status ²
Hydrogen Sulfide (H ₂ S)	Attainment	—
Sulfates	Attainment	—
Vinyl Chloride	Attainment	—

Notes:
 NAAQS = National Ambient Air Quality Standards
 SoCAB = South Coast Air Basin
^a On June 15, 2005, the 1-Hour Ozone NAAQS was revoked for all areas except the 8-Hour Ozone Nonattainment Early Action Compact areas. However, the SoCAB has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.
 Source: South Coast Air Quality Management District (SCAQMD). 2016. Clean Air Plans.

2.3.2 - Local Air Quality

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. Table 3 summarizes published monitoring data from 2019 through 2021. The table displays data from the Riverside-Rubidoux Station, which was the closest monitoring station to the project site with available data. The data shows that during the past few years, the project area has exceeded the standards for ozone (State and federal), PM₁₀ (State), and PM_{2.5} (State and federal). The data in the table reflects the concentration of the pollutants in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for Riverside County or the SoCAB was available for CO or SO₂. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2019	2020	2021
Ozone ¹	1 Hour	Max 1 Hour (ppm)	0.123	0.143	0.117
		Days > State Standard (0.09 ppm)	24	46	20
	8 Hours	Max 8 Hours (ppm)	0.096	0.115	0.097
		Days > State Standard (0.07 ppm)	59	82	55
		Days > National Standard (0.075 ppm)	37	60	32
Carbon monoxide (CO)	8 Hours	Max 8 Hours (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
Nitrogen dioxide (NO ₂)	Annual	Annual Average (ppm)	0.060	0.060	0.060
	1 Hour	Max 1 Hour (ppm)	0.056	0.066	0.052
		Days > State Standard (0.18 ppm)	0	0	0

Air Pollutant	Averaging Time	Item	2019	2020	2021
Sulfur dioxide (SO ₂)	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hours	Max 24 Hours (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM ₁₀) ¹	Annual	State Annual Average (µg/m ³)	40.9	ND	33.2
	24 Hours	Max 24 Hours (µg/m ³)	182.4	137.7	114.3
		Days > State Standard (50 µg/m ³)	44	44	41
		Days > National Standard (150 µg/m ³)	0	0	0
Fine particulate matter (PM _{2.5}) ²	Annual	State Annual Average (12 µg/m ³)	11.2	14.1	13.2
	24 Hours	Max 24 Hours (µg/m ³)	55.7	59.9	82.1
		Days > National Standard (35 µg/m ³)	5	12	11
<p>Notes: > = exceed µg/m³ = micrograms per cubic meter Bold = exceedance max = maximum National Standard = National Ambient Air Quality Standard (NAAQS) ND = no data ppm = parts per million State Standard = California Ambient Air Quality Standard (CAAQS) ¹ All data were retrieved from Riverside-Rubidoux Station. ² State and National PM_{2.5} Annual Average Standard is 12 µg/m³ Source: California Air Resources Board (ARB). 2022. Top Four Summary. Website: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed August 22, 2022.</p>					

The health impacts of the various air pollutants of concern can be presented in several ways. The clearest comparison is to the State and federal ozone standards. If concentrations are below the standard, it is safe to say that no significant health impact would occur to anyone. When concentrations exceed the standard, impacts will vary based on the amount by which the standard is exceeded. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of health impacts compared with concentrations in the air.

Based on the AQI scale for the 8-hour ozone standard, the City of Riverside experienced many days in the last 3 years that would be categorized as unhealthful (AQI 200) and as many as 82 days that were unhealthful for sensitive groups (AQI 150) or moderate (AQI 100) as measured at the Riverside-Rubidoux Monitoring Station. The highest 1-hour maximum reading was 143 parts per billion (ppb) in 2020, which is “Very Unhealthy.”^{12,13}

The other nonattainment pollutant of concern is PM₁₀ and PM_{2.5}. For PM_{2.5}, an AQI of 100 or lower is considered moderate and would be triggered by a 24-hour average concentration of 35.4 µg/m³, which is considered an exceedance of the federal PM_{2.5} standard. The project area did exceed the

¹² AirNow. Air Quality Index (AQI) Basics. Website: <https://www.airnow.gov/aqi/aqi-basics/>. Accessed August 25, 2022.

¹³ AirNow. AQI Calculator. Website: <https://www.airnow.gov/aqi/aqi-calculator/>. Accessed August 25, 2022.

standard for 5 days in 2019, 12 days in 2020, and 11 days in 2021. The highest 24-hour average concentration recorded in the project area was 82.1 µg/m³ in 2021. People with respiratory or heart disease, the elderly, and children are the groups most at risk. Usually under such air quality level, the sensitive population should consider reducing prolonged or heavy exertion.

2.4 - Air Quality Plans and Regulations

Air pollutants are regulated at the national, State, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level, and the ARB regulates at the State level. The SoCAB is located within the SCAQMD. The SCAQMD includes Riverside County in its planning area and also includes portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. Within Riverside County, the SCAQMD also has jurisdiction over the Salton Sea Air Basin (SSAB) and a portion of the Mojave Desert Air Basin (MDAB).¹⁴

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIPs), provides research and guidance for air pollution programs, and sets NAAQS, also known as the federal standards, described earlier.

An SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated as nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain and maintain air quality standards on schedule. For many areas of California, however, additional State and local regulations are required to achieve the standards. Regulations adopted by California are described below.

2.4.1 - California Regulations

Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represented continuing progress in emission reductions. As the State's passenger vehicle fleet continued to grow and more sport utility vehicles and pickup trucks were used as passenger cars

¹⁴ South Coast Air Quality Management District (SCAQMD). Jurisdiction Map. Website: <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-jurisdiction.pdf>. Accessed October 24, 2022.

rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Cars Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and GHGs for new passenger vehicles.¹⁵

Executive Order N-79-20. Executive Order N-79-20 directs the State to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles.¹⁶

ARB Advanced Clean Cars II Rule. Adopted by the ARB in August 2022, the Advanced Clean Cars II regulation supports the implementation of Executive Order N-79-20 and requires that by 2035, all new passenger cars, trucks and SUVs sold in California will be zero emissions.¹⁷

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, of the California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, the School Bus Program, and others.¹⁸

ARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to \$10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_x emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus Regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer, heavier trucks and buses met PM filter requirements beginning January 1,

¹⁵ California Legislative Information. 2002. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493. Accessed October 24, 2022.

¹⁶ Executive Department State of California. 2020. Executive Order N-79-20.

¹⁷ California Air Resource Board (ARB). Proposed Advanced Clean Cars II Regulations. Website: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed October 20, 2022.

¹⁸ California Air Resource Board (ARB). On-Road Heavy-Duty Vehicle Programs. <https://ww2.arb.ca.gov/road-heavy-duty-regulations-certification-programs>. Accessed October 24, 2022.

2012. Mandatory replacement of lighter and older heavier trucks began January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.¹⁹

California Air Resources Board Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Airborne Toxic Control Measure (ATCM) for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of BMPs to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification, and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre. These projects require the submittal of a “Dust Mitigation Plan” and approval by the ARB prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs; the project site includes a few metal structures which would be demolished as part of the proposed project. In addition, asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site.²⁰

Diesel Risk Reduction Plan

The ARB’s Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for

¹⁹ California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about>. Accessed October 24, 2022.

²⁰ Department of Conservation. 2000. A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos.

all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels.

The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010 and 85 percent by 2020.²¹

Regulations for Heavy-Duty Vehicles/Trucks

California Air Resources Board Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. This ATCM adopted Section 2485 within Chapter 10, Article 1, Division 3, title 13 in the California Code of Regulations. The measure limits the idling of diesel vehicles (i.e., commercial trucks over 10,000 pounds) to reduce emissions of toxins and criteria pollutants. The driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location; and (2) shall not idle a diesel-fueled auxiliary power system for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

California Air Resources Board Requirements to Reduce Idling Emissions from New and In-Use Trucks. Amendments were made to Title 13 of the California Code of Regulations, Sections 1956.8, 2404, 2424, 2425, and 2485. The amendment states: "all new 2008 and subsequent model year heavy-duty diesel engines shall be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to 'neutral' or 'park,' and the parking brake is engaged. If the parking brake is not engaged, then the engine shutdown system shall shut down the engine after 900 seconds of continuous idling operation once the vehicle is stopped and the transmission is set to 'neutral' or 'park.'" There are a few conditions where the engine shutdown system can be overridden to prevent engine damage. Any project trucks manufactured after 2008 would be consistent with this rule, which would ultimately reduce air emissions.

Statewide Truck and Bus Regulation (Regulation to Reduce Emissions of DPM, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles, Title 13, California Code of Regulations, Section 2025). On December 12, 2008, the ARB approved this regulation to reduce emissions from existing on-road diesel trucks and buses operating in California. This regulation applies to all on-road heavy-duty diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds, agricultural yard trucks with off-road certified engines, and certain diesel-fueled shuttle vehicles of any gross vehicle weight rating. Out-of-state trucks and buses that operate in California are also subject to the regulation. Under the regulation, older, heavier trucks (i.e., those with pre-2000-year engines and a gross vehicle weight rating greater than 26,000 pounds), are required to have installed a PM filter and must be replaced with a 2010 engine between 2015 and 2020, depending on the model year.

²¹ California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: <https://ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan>. Accessed October 24, 2022.

Air Toxics Contaminant Measure for Transportation Refrigeration Units and Transportation Refrigeration Generator Sets was adopted by the ARB to reduce emissions of TAC emissions from in-use Transport Refrigeration Units (TRUs) and TRU generator sets used to power electrically-driven refrigerated shipping.²²

2.4.2 - South Coast Air Quality Management District

SCAQMD CEQA Air Quality Guidelines

Standard Conditions

During construction and operation, the proposed project must comply with applicable rules and regulations. The following are rules and regulations the proposed project may be required to comply with, either directly or indirectly.

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through the application of standard BMPs, such as the application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with the Best Available Control Measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 measures may include, but are not limited to, the following:

- Apply non-toxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)

²² California Air Resource Board (ARB). 2022. Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units. Website: <https://ww2.arb.ca.gov/resources/fact-sheets/2022-amendments-tru-atcm/printable/print>. Accessed October 24, 2022.

- Cover all trucks hauling dirt, sand, soil, or other loose materials or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Provide bumper strips or similar BMPs where vehicles enter and exit the construction site onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Replant disturbed areas as soon as practical.
- During all construction activities, sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, State, county, agency, or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303 governs the permitting of relocated or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM₁₀ among other pollutants.

SCAQMD Rule 1401.1 provides additional health protection to children at schools or schools under construction from new or relocated facilities emitting TACs.

SCAQMD Rule 1403 establishes Survey Requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities.

SCAQMD Rule 2202, On-Road Motor Vehicle Mitigation Options, provides employers with a menu of options to reduce mobile source emissions generated from employee commutes to comply with federal and State Clean Air Act requirements, Health and Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

SCAQMD Rule 2305 is an indirect source rule that regulates warehouse facilities with at least 100,000 square feet of indoor floor space in a single building. The rule requires the implementation of emission reduction measures, or the payment of an annual mitigation fee, as well as requiring reporting on facility operations. The intent of the rule is to reduce emissions from the goods movement industry.

Air Quality Management Plans

As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. In the SoCAB, the SCAQMD is required to prepare a plan for improvement for the air pollutants for which the SoCAB is in nonattainment.

On March 3, 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP addressed strategies and measures to attain the 2008 federal 8-hour ozone standard by 2032, the 2012 federal annual PM_{2.5} standard by 2021 to 2025, and the 2006 federal 24-hour PM_{2.5} standard by 2019. The 2016 AQMP also examined the regulatory requirements for attaining the 2015 federal 8-hour ozone standard. The 2016 AQMP also updates previous attainment plans for ozone and PM_{2.5} that have not yet been met.²³ In general, the AQMP is updated every 3 to 4 years. However, the air quality planning process for the AQMP is continuous and each iteration is an update of the previous plan.

To ensure air quality goals will be met while minimizing impacts to the regional economy, the following policy objectives guided the development of the plan:

- Eliminate reliance on “black box” (future technologies) to the maximum extent possible by providing specific pathways to attainment with specific control measures.
- Calculate and take credit for co-benefits from other planning efforts (e.g., GHG reduction targets, energy efficiency, and transportation).
- Develop a strategy with fair share emission reductions at the federal, State, and local levels, such as a new federal engine emission standards and/or additional authority provided to the State or SCAQMD for mobile sources.
- Seek significant funding for incentives to implement early deployment and commercialization of known zero and near-zero technologies.

²³ South Coast Air Quality Management District (SCAQMD). 2017. Final 2016 Air Quality Management Plan. March.

- Invest in strategies and technologies meeting multiple objectives regarding air quality, climate change, air toxic exposure, energy, and transportation.
- Enhance the socioeconomic analysis and select the most efficient and cost effective path to achieve multi-pollutant and multi-deadline targets.
- Prioritize non-regulatory, innovative, and “win-win” approaches for emission reductions.

The AQMP also demonstrates compliance with all applicable Federal Clean Air Act requirements pertaining to nonattainment areas pursuant to the EPA-approved Implementation Rules, such as the annual average and summer planning emission inventory for criteria and precursor pollutants, attainment demonstrations, reasonably available control measures and reasonably available control technology analyses, reasonable further progress, PM precursor requirements, Vehicle Miles Traveled (VMT) demonstrations, and transportation conformity budgets for SoCAB.

The control measures in the 2016 AQMP are based on implementing all feasible control measures through the accelerated deployment of available cleaner technologies, BMPs, co-benefits from existing programs, and incentive measures. The 2016 AQMP control measures consist of three main components: (1) the SCAQMD’s Stationary and Mobile Source Control Measures; (2) suggested State and federal Source Control Measures; and (3) Regional Transportation Plan Transportation Control Measures provided by the Southern California Association of Governments (SCAG). These measures rely on not only the traditional command-and-control approach but also public incentive programs, as well as advanced technologies expected to be developed and deployed in the next several years.

SCAQMD is currently in the process of updating the AQMP to address the recently strengthened primary and secondary NAAQS for ozone, which were lowered to 70 ppb by EPA in 2015. The SoCAB is classified as an “extreme” nonattainment area for the 2015 Ozone NAAQS. The 2022 AQMP is currently in progress and is being developed to address the requirements for meeting this standard.

SCAQMD CEQA Guidance

The SCAQMD has two roles under CEQA:

1. Lead Agency: responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SCAQMD where the SCAQMD has primary approval authority over the proposed project.
2. Commenting Agency: reviews and comments on air quality analyses prepared by other public agencies (such as the proposed project).

The SCAQMD also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance as well as State regulations to control air pollution is an overall improvement in the project area.

2.4.3 - Local

City of Riverside General Plan

The City of Riverside General Plan 2025 guides local government decision on growth, capital investment, and physical development in the City. The City amended the General Plan's Air Quality Element in 2007. The General Plan has the following measures adopted to mitigate air quality impacts:²⁴

Air Quality (AQ) Element Policy

- AQ-1.1** Ensure that all land use decisions, including enforcement actions, are made in an equitable fashion to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status or geographic location, from the health effects of air pollution.
- AQ-1.2** Consider potential environmental justice issues in reviewing impacts (including cumulative impacts for each project proposed).
- AQ-1.3** Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.
- AQ-1.15** Establish land use patterns that reduce the number and length of motor vehicle trips and promote alternative modes of travel.
- AQ-1.21** Cooperate and participate in regional air quality management plans, programs and enforcement measures.
- AQ-2.4** Monitor and strive to achieve performance goals and/or VMT reduction, which are consistent with SCAG's goals.
- AQ-2.11** Develop ways to incorporate the "Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" into the Development Review process and citywide air quality education programs.
- AQ-2.17** Encourage, and to the extent possible, require through the land use entitlement or business regulation process, business owners to schedule deliveries at off-peak traffic periods.
- AQ-4.2** Reduce particulate matter from agriculture (e.g., require use of clean non-diesel equipment and particulate traps), construction, demolition, debris hauling, street cleaning, utility maintenance, railroad right-of-way and off-road vehicles to the extent possible as provided in SCAQMD Rule 403.
- AQ-4.3** Support the reduction of all particulates' potential sources.

²⁴ City of Riverside. 2007. General Plan Air Quality Element.

AQ-4.4 Support programs that reduce emissions from building materials and methods that generate excessive pollutants through incentives and/or regulations.

AQ-4.5 Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hours.

City of Riverside General Plan EIR

The air quality impacts of implementation of the General Plan were evaluated in the General Plan EIR. The General Plan EIR provides the following mitigation measures to reduce air pollutant impacts.²⁵

The following standard design measures shall be implemented to address short-term construction impacts as appropriate on a case-by case basis:

SDM Air 1 To mitigate for potential adverse impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available Urban Emissions (URBEMIS) model, or other methods sanctioned by the South Coast Air Quality Management District (SCAQMD). The analysis of construction-related air quality impacts shall be included in the development project's CEQA analysis, including recommended mitigation measures. Proposed mitigation measures may include extending the construction period as feasible in order to ensure air quality thresholds are not exceeded. The analysis shall address pollution levels near sensitive receptors and require mitigation to reduce emissions.

SDM Air 2 To mitigate for potential adverse impacts resulting from construction activities, development projects must abide by the South Coast Air Quality Management District (SCAQMD) Rule 403 concerning Best Management Practices for construction sites in order to reduce emissions during the construction phase. Measures may include:

- Development of a construction traffic management program that includes, but is not limited to, rerouting construction-related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site;
- Sweep streets at the end of the day if visible soil material is carried onto adjacent paved public roads;
- Wash off trucks and other equipment leaving the site;
- Replace ground cover in disturbed areas immediately after construction;
- Keep disturbed/loose soil moist at all times;
- Suspend all grading activities when wind speeds exceed 25 miles per hour;
- Enforce a 15-mile per hour speed limit on unpaved portions of the construction site.

²⁵ City of Riverside. 2007. General Plan and Supporting Documents EIR, Section 5.3 Air Quality.

- SDM Air 4** To reduce diesel emissions associated with construction, construction contractors shall provide temporary electricity to the site to eliminate the need for diesel-powered electric generators, or provide evidence that electrical hook ups at construction sites are not cost effective or feasible.
- SDM Air 5** To reduce construction-related particulate matter air quality impacts of City projects, the following measures shall be required:
1. The generation of dust shall be controlled as required by the South Coast Air Quality Management District (SCAQMD).
 2. Grading activities shall cease during periods of high winds (greater than 25 mph).
 3. Trucks hauling soil, dirt or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the City Engineer.
 4. The contractor shall prepare and maintain a traffic control plan, prepared, stamped and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with Chapter 5 of the latest edition of the Caltrans Traffic Manual and the State Standard Specifications. The plan shall be submitted for approval by the engineer at the preconstruction meeting. Work shall not commence without an approved traffic control plan.

The following standard design measures shall be implemented to address long-term operational impacts:

- SDM Air 6** Within a year of adoption of the General Plan 2025 Program the City will implement the Good Neighbor Guidelines prepared by Western Riverside Council of Governments in coordination with the South Coast Air Quality Management District (SCAQMD). Implementation of these Guidelines shall include, but are not limited to, measures to:
- minimize exposure to diesel emissions to neighbors in close proximity to a warehouse/distribution center;
 - substantially eliminate diesel trucks from unnecessarily traversing through residential neighborhoods; and
 - reduce diesel idling within the warehouse/distribution center.
- SDM Air 7** As part of the CEQA process, the City shall require proposed development projects with potential operational air quality impacts to identify and mitigate those impacts. To ensure proper characterization and mitigation of those impacts, regional impacts shall be analyzed using the latest available Urban Emissions (URBEMIS) model, or other analytical method determined in conjunction with the South Coast Air Quality Management District (SCAQMD). To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, carbon monoxide (CO) Hot Spot analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation. Mitigation should reduce identified impacts

to the maximum extent feasible using, among others, measures identified in the Air Quality Element Policies of the General Plan and the most recent Air Quality Management Plan (AQMP) as well as mitigation from the most recent CEQA Air Quality Handbook available at the SCAQMD. Example topics include, but are not limited to, energy conservation, reduction of Vehicle Miles Traveled (VMT), overall trip reduction, and reduction of particulate matter.

Hunter Park Specific Plan

The intent of the Specific Plan is to provide high quality industrial, commercial, and office land uses to serve the existing and future residents and business of the City of Riverside.²⁶ The project site is zoned for Business and Manufacturing Park Zone. This zone provides for light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous materials, and retail related to manufacturing. The Specific Plan provides design guidelines for land use and circulation for the plan area. The Specific Plan does not require design features or other measures that are intended to reduce impacts related to air quality, GHG emissions, or energy consumption.

City of Riverside Municipal Code

The Riverside Municipal Code establishes the following air quality provisions that are relevant to the proposed project (Riverside Municipal Code § 16.07.020).

ZONES Chapter 16.07 - GREEN CODE

16.07.020—California Green Building Standards Code adopted—Filed with Building Official

The California Green Building Standards Code, 2019 Edition, including any related errata, and any amendments thereto by the State of California in the 2019 Edition of Title 24 of the California Code of Regulations, which regulates the planning, design, operation, use and occupancy of every newly constructed building or structure is adopted and by this reference is made a part of this Code with the force and effect as though set out herein in full, with the exception of those parts expressly excepted and deleted or as amended by this chapter. One copy of the California Green Building Standards Code with the amendments thereto by the State of California, which has been certified as a true copy, is on file and open to public inspection in the office of the building official.

²⁶ City of Riverside. Adopted in 1988; amended in 2002. Hunter Business Park Specific Plan. April.

SECTION 3: CLIMATE CHANGE SETTING

3.1 - Climate Change

Climate change is a change in the average weather of Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. Working Group I predicted that increase in global surface temperature is 1.09°C (degrees Celsius) in 2011–2020 above 1850–1900. The estimated increase in global surface temperature since the Fifth Assessment Report is principally due to further warming from 2003–2012. Considering all five illustrative scenarios assessed by Working Group I, there is at least a greater than 50 percent likelihood that global warming will reach or exceed 1.5°C in the near-term, even for the very low greenhouse gas emissions scenario.²⁷ The report also stated that “[e]xtreme climate events comprising conditions beyond which many species are adapted are occurring on all continents, with severe impacts,” and that “[w]ithout urgent and ambitious emissions reductions, more terrestrial, marine and freshwater species and ecosystems will face conditions that approach or exceed the limits of their historical experience.”

An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the project participates in the potential for global climate change by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on global climate change.

3.1.1 - Consequences of Climate Change in California

In California, climate change may result in consequences such as the following.^{28, 29}

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.

²⁷ Intergovernmental Panel on Climate Change (IPCC). 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Website: <https://www.ipcc.ch/report/ar6/wg2/>. Accessed October 25, 2022.

²⁸ California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077.

²⁹ Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071.

- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the twenty-first century because more winter rain will stimulate the growth of more plant “fuel” available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today’s conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California’s coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California’s forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

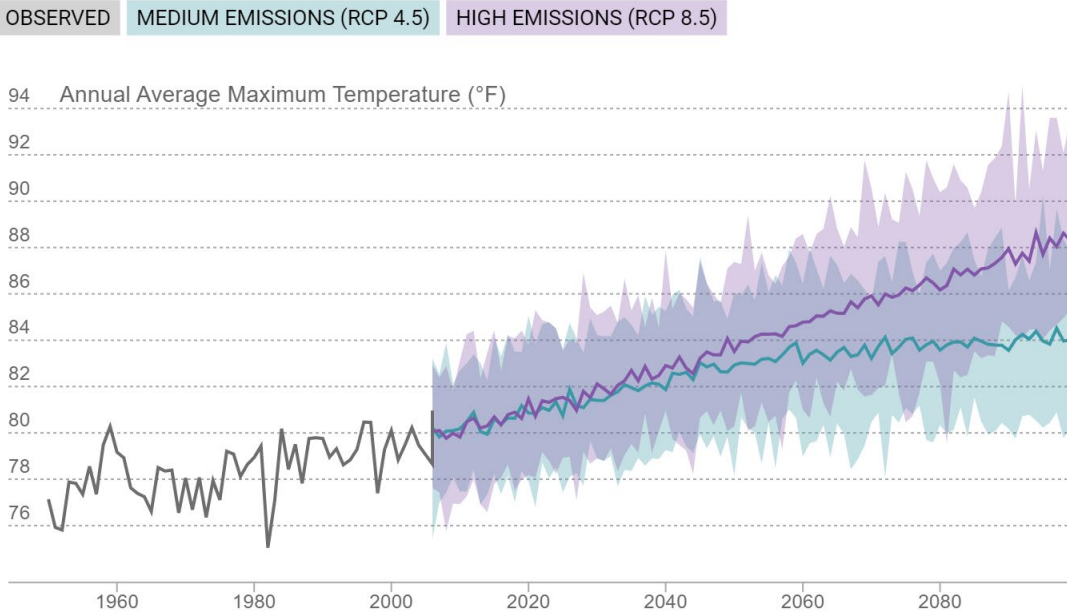
City of Riverside Area

Figure 1 displays a chart of measured historical and projected annual average temperatures in the City of Riverside area. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios. The results indicate that temperatures by the end of the century are predicted to increase by 5.7°F under the medium emissions scenario and 8.8°F under the high emissions scenario.³⁰

³⁰ Cal-Adapt. 2022. Local Climate Snapshots. Website: <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed September 6, 2022.

Annual Average Maximum Temperature

Average of all the hottest daily temperatures in a year.



Source: Cal-Adapt. 2022. Local Climate Snapshots. Website: <https://cal-adapt.org/tools/local-climate-change-snapshot/>. Accessed October 28, 2022.

Figure 1: Observed and Projected Temperatures for Climate Change in the Project Area

3.2 - Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbons, hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF₆), ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the Earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Individual GHG compounds have varying global warming potential and atmospheric lifetimes. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. To describe how much global warming a given type and amount of GHG may cause, the CO₂ equivalent (CO₂e) is used. The calculation of the CO₂ equivalent is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO₂. For example, CH₄'s warming potential of 25 indicates that CH₄ has 25 times greater warming effect than CO₂ on a molecule-per-molecule basis. A CO₂ equivalent is the mass emissions of an individual GHG multiplied by its global warming potential. As described in Table 4, the GHGs defined by Assembly Bill (AB) 32 (see the Climate Change Regulatory Environment section for a description) include CO₂, CH₄, N₂O,

HFC, PFC, and SF₆. A seventh GHG, nitrogen trifluoride (NF₃), was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern.

Table 4: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes.
CH ₄	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.
CO ₂	CO ₂ is an odorless, colorless, natural GHG. CO ₂ 's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
HFC	HFCs are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	HFCs are synthetic man-made chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
PFC	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200.	Two main sources of PFCs are primary aluminum production and semiconductor manufacturing.
SF ₆	SF ₆ is an inorganic, odorless, colorless, and non-toxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is man-made and used for insulation in electric power transmission equipment in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Nitrogen trifluoride	Nitrogen trifluoride (NF ₃) was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern. It has a high global warming potential of 17,200.	This gas is used in electronics manufacture for semiconductors and liquid crystal displays.
Sources: Compiled from a variety of sources, primarily Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. (Core Writing Team, Pachauri, R.K. and Reisinger, A. editors).		

The State of California has begun the process of addressing pollutants referred to as short-lived climate pollutants. The short-lived climate pollutants include three main components: black carbon,

fluorinated gases, and methane. The ARB approved the Short-Lived Climate Pollutant Reduction Strategy in March 2017. The ARB has completed an emission inventory of these pollutants, identified research needs, identified existing and potential new control measures that offer co-benefits, and coordinated with other State agencies and districts to develop measures.³¹ Typical sources of black carbon are already regulated by the ARB, and air district criteria pollutant and toxic regulations control PM_{2.5} from diesel engines and other combustion sources.³² Additional controls on the sources of black carbon, specifically for their GHG impacts beyond those required for toxic and fine particulates, are not likely to be needed.

Human Health Effects of GHG Emissions

GHG emissions from development projects do not result in concentrations that would directly impact public health. However, the cumulative effects of GHG emissions on climate change have the potential to cause adverse effects to human health.³³

The United States Global Change Research Program, in its Global Climate Change Impacts in the United States report,³⁴ has analyzed the degree to which impacts on human health are expected to impact the United States.

Potential effects of climate change on public health include:

- **Direct Temperature Effects:** Climate change may directly affect human health through increases in average temperatures, which are predicted to increase the incidence of heat waves and hot extremes.
- **Extreme Events:** Climate change may affect the frequency and severity of extreme weather events, such as hurricanes and extreme heat and floods, which can be destructive to human health and well-being.
- **Climate-Sensitive Diseases:** Climate change may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects, such as malaria, dengue fever, yellow fever, and encephalitis.
- **Air Quality:** Respiratory disorders may be exacerbated by warming-induced increases in the frequency of smog (ground level ozone) events and particulate air pollution.

Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (PM). At very high indoor concentrations (not at levels existing outside), CO, CH₄, SF₆, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.

³¹ California Air Resources Board (ARB). 2016. Proposed Short-Lived Climate Pollutant Reduction Strategy. Website: <http://www.arb.ca.gov/cc/shortlived/shortlived.htm>. Accessed October 24, 2022.

³² California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: <http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm>. Accessed October 24, 2022.

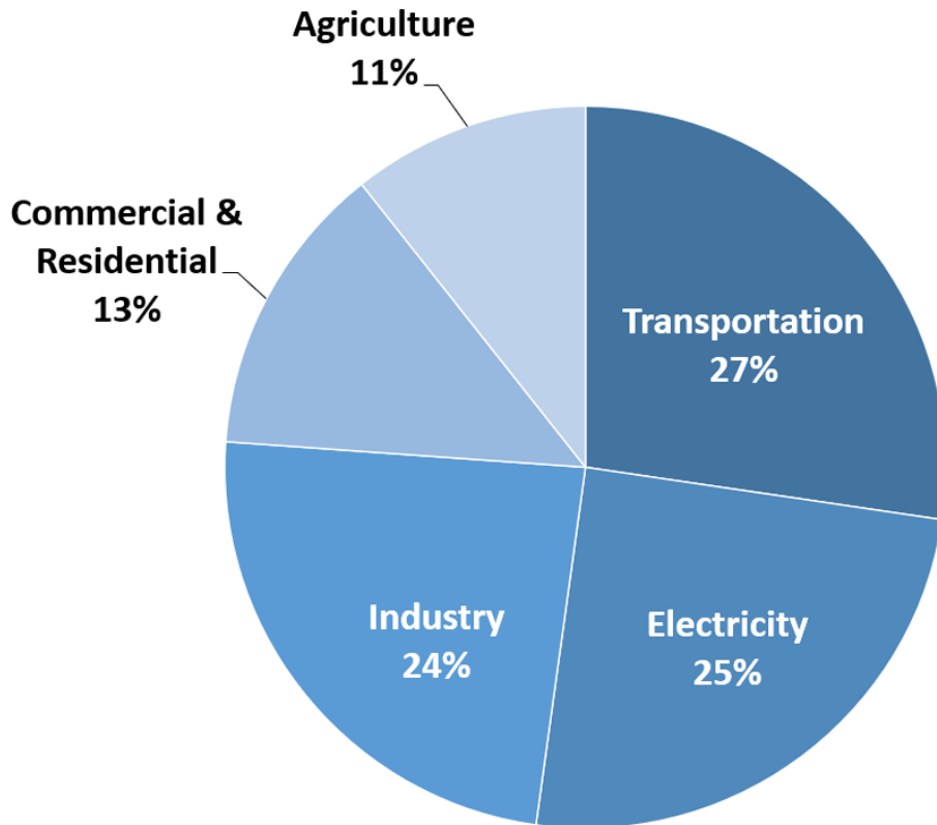
³³ Centers for Disease Control and Prevention (CDC). CDC's Climate and Health Program - an Investment in our Future. Website: <https://www.cdc.gov/climateandhealth/factsheet.htm>. Accessed October 24, 2022.

³⁴ The United States Global Change Research Program. 2009. Global Climate Change Impacts in the United States.

3.2.1 - Emissions Inventories

United States GHG Inventory

In 2019, United States GHG emissions totaled 6,558 million metric tons (MMT) CO₂e. In 2020, U.S. GHG emissions totaled 5,222 million MMT CO₂e after accounting for sequestration from the land sector. Emissions decreased from 2019 to 2020 by 11 percent (after accounting for sequestration from the land sector). The primary driver for the decrease was an 11 percent decrease in CO₂ emissions from fossil fuel combustion. This decrease was primarily due to a 13 percent decrease in transportation emissions driven by decreased demand due to the ongoing COVID-19 pandemic. Figure 2 presents 2020 United States GHG emissions by economic sector. GHG emissions in 2020 were 21 percent below 2005 levels.³⁵



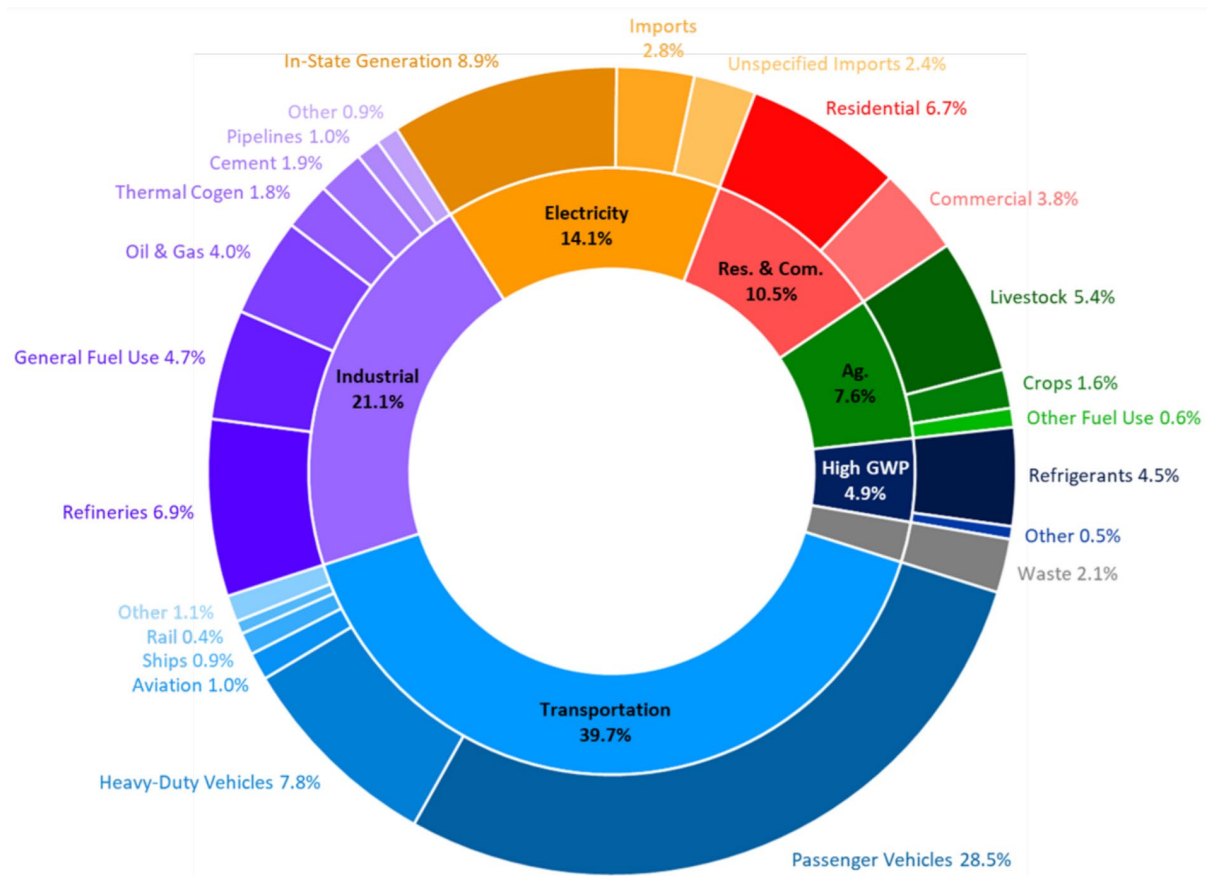
Source: Inventory of U.S. GHG Emissions and Sinks. 2022. Website: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed October 21, 2022.

Figure 2: Sources of U.S. Greenhouse Gas Emissions in 2020

³⁵ United States Environmental Protection Agency (EPA). 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Website: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed October 21, 2022.

California GHG Inventory

As the second largest emitter of GHG emissions in the United States, California contributes a large quantity (481.2 MMT CO₂e in 2019) of GHG emissions to the atmosphere.³⁶ Anthropogenic CO₂ are largely byproducts of fossil fuel combustion and are attributable to transportation, industry/manufacturing, electricity generation, natural gas consumption, and agriculture processes. As shown in Figure 3, in California, the transportation sector is the largest emitter at approximately 40 percent of GHG emissions, followed by industrial at approximately 21 percent of GHG emissions.³⁷



Source: California Air Resources Board (ARB). 2021. California GHG Inventory.

Figure 3: California GHG Emissions by Sector in 2019

3.3 - Regulatory Environment

3.3.1 - International

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and

³⁶ California Air Resources Board (ARB). 2021. Current California GHG Emission Inventory Data. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed October 21, 2022.

³⁷ California Air Resources Board (ARB). 2021. California GHG Inventory. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf. Accessed October 21, 2022.

socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations Framework Convention on Climate Change. On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it set binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5 percent against 1990 levels over the 5-year period from 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol committed them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol placed a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the United States Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. There have been several meetings held to address international climate change commitments post Kyoto, the most notable of which were held by the United Nations Climate Change Committee. The meetings are gradually gaining consensus among participants on individual climate change issues. At the Climate Summit hosted by the United Nations in September 2014, heads of government, business, and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Paris Climate Change Agreement. Parties to the Convention reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a 4-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review. The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st Session of the Convention Conference of the Parties, or COP 21.³⁸

On June 1, 2017, former President Donald Trump announced the decision for the United States to withdraw from the Paris Climate Accord.³⁹ On January 20, 2021, President Biden announced the

³⁸ Center for Climate and Energy Solutions (C²ES). 2015. Outcomes of the U.N. Climate Change Conference. Website: <http://www.c2es.org/international/negotiations/cop21-paris/summary>. Accessed October 24, 2022.

³⁹ The White House. Statement by former President Trump on the Paris Climate Accord. Website: <https://it.usembassy.gov/statement-president-trump-paris-climate-accord/>. Accessed October 24, 2022.

decision for the United States to re-commit to the Paris Climate Accord.⁴⁰ The United States officially became a party to the Agreement once again on February 19, 2021, after a mandatory 30-day waiting period.⁴¹ California remains committed to combating climate change through programs aimed to reduce GHGs.⁴²

3.3.2 - Federal Regulations

The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four GHGs, including CO₂, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles” below. After a lengthy legal challenge, the United States Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator findings.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation’s National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applied to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. It required these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, equivalent to 35.5 miles per gallon (mpg) if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. Together, these standards would cut CO₂ emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light-duty vehicles for model

⁴⁰ The White House. 2021. Statement by President Biden: Paris Climate Agreement. Website: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/>. Accessed October 24, 2022.

⁴¹ United States Department of State. 2021. The United States Officially Rejoins the Paris Agreement. Website: <https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/>. Accessed October 24, 2022.

⁴² California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-Emission Vehicles. Website: <https://ww2.arb.ca.gov/news/california-and-china-team-push-millions-more-zero-emission-vehicles>. Accessed October 24, 2022.

years 2017 through 2025 in August 2012.⁴³ The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements.

The EPA and the United States Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO₂ emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

The State of California has received a waiver from the EPA to have separate, stricter corporate average fuel economy standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. To manage the State's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975. It should be noted that the EPA recently rescinded California's waiver for its GHG and Zero-Emission Vehicle (ZEV) mandates; however, all ARB standards are still in effect at the time of this writing.⁴⁴ In September 2020, Governor Gavin Newsom issued Executive Order N-79-20, which requires sales of all new passenger vehicles to be zero-emission by 2035 and additional measures to eliminate harmful emissions from the transportation sector.

Consolidated Appropriations Act (Mandatory GHG Reporting). The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons (MT) or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010, which established thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final

⁴³ United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. August. Website: <https://www.nhtsa.gov/document/fact-sheet-epa-and-nhtsa-propose-standards-reduce-greenhouse-gas-emissions-and-improve>. Accessed October 24, 2022.

⁴⁴ Beveridge & Diamond Professional Corporation. 2019. EPA Rescinds California's Authority to Regulate Vehicle Tailpipe Greenhouse Gas Emissions and to Implement a Zero-Emission Vehicle Program. September 23. Website: <https://www.bdlaw.com/publications/epa-rescinds-californias-authority-to-regulate-vehicle-tailpipe-greenhouse-gas-emissions-and-to-implement-a-zero-emission-vehicle-program/>. Accessed October 24, 2022.

rule “tailors” the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units. As required by a settlement agreement, the EPA proposed new performance standards for CO₂ emissions for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of CO₂ per megawatt-hour (MWh) based on the performance of widely used natural gas combined cycle technology.

Cap-and-Trade. Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. There is no federal GHG Cap-and-Trade Program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Western Climate Initiative partner jurisdictions developed a comprehensive initiative to reduce regional GHG emissions to 1990 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Québec. Currently only California and Québec are participating in the Cap-and-Trade Program.⁴⁵

3.3.3 - California

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark AB 32 California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as the Title 24 and Title 20 energy standards, was originally adopted for other purposes, such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA’s denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the United States District Court for the District of Columbia in 2011.⁴⁶ The standards were to be phased in during the 2009 through

⁴⁵ Center for Climate and Energy Solutions (C²ES). 2015. Cap-and-Trade Basics. Website: <https://www.c2es.org/content/cap-and-trade-basics/>. Accessed October 24, 2022.

⁴⁶ California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: <http://www.arb.ca.gov/cc/ccms/ccms.htm>. Accessed October 24, 2022.

2016 model years.⁴⁷ It should be noted that the EPA recently rescinded California’s waiver for its GHG and ZEV mandates; however, all ARB standards are still in effect at the time of this writing.⁴⁸

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the LEV Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.⁴⁹

Assembly Bill 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. Greenhouse gases, as defined under AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT CO₂e on December 6, 2007.⁵⁰ Therefore, to meet the State’s target, emissions generated in California in 2020 were required to be equal to or less than 427 MMT CO₂e. Emissions in 2020 in a Business as Usual (BAU) scenario were estimated to be 596 MMT CO₂e, which does not account for reductions from AB 32 regulations.⁵¹ At that rate, a 28 percent reduction was required to achieve the 427 MMT CO₂e 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.⁵² On July 11, 2018, ARB announced that the State has met its target of reducing GHG emissions to 1990 levels.⁵³

California Air Resources Board Scoping Plan. The ARB Climate Change Scoping Plan (Scoping Plan) contains measures that were designed to reduce the State’s emissions to 1990 levels by the year 2020 to comply with AB 32.⁵⁴ The Scoping Plan identified recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions

⁴⁷ California Air Resources Board (ARB). Advanced Clean Cars Summary. Website: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf. Accessed October 24, 2022.

⁴⁸ Beveridge & Diamond Professional Corporation. 2019. EPA Rescinds California’s Authority to Regulate Vehicle Tailpipe Greenhouse Gas Emissions and to Implement a Zero-Emission Vehicle Program. September 23.

⁴⁹ California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures.

⁵⁰ California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007.

⁵¹ California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan.

⁵² California Air Resources Board (ARB). 2014 Edition BAU Emissions Projection. Website: <https://ww2.arb.ca.gov/ghg-bau>. Accessed October 24, 2022.

⁵³ California Air Resources Board. 2018. Climate Pollutants Fall Below 1990 Levels for First Time. Website: <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>. Accessed October 24, 2022.

⁵⁴ California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan.

target—each sector had a different emission reduction target. Most of the measures targeted the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target included:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
- Achieving a Statewide renewables energy mix of 33 percent.
- Developing a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system.
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS).
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State’s long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between “capped” and “uncapped” strategies. Capped strategies are subject to the proposed Cap-and-Trade Program. Implementation of the capped strategies is calculated to achieve a sufficient number of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.⁵⁵

The ARB approved the First Update to the Scoping Plan on May 22, 2014. The First Update builds upon the initial Scoping Plan with new strategies and recommendations.

The elements of the framework proposed to achieve the emission reduction targets are as follows:

- Transportation
 - Achieve 100 percent ZEV sales of light-duty vehicles by 2035 and medium heavy-duty vehicles by 2040.
 - Achieve a 20 percent zero-emission target for the aviation sector.
 - Prioritize and increase funding for clean transportation equity programs.
 - Accelerate the reduction and replacement of fossil fuel production and consumption in California.
 - Increase the stringency and scope of the LCFS.
 - Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below by 2045.

⁵⁵ California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan.

- Clean Electricity Grid
 - Per SB 350, double Statewide energy efficiency savings by 2030.
 - Use long-term planning processes to support grid reliability and expansion of renewable and zero-carbon development.
 - Per SB 100 and 1020, achieve 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively.
- Sustainable Manufacturing and Buildings
 - Maximize air quality benefits using the best available control technologies for stationary sources in communities most in need.
 - Implement SB 905.
 - Develop a net-zero cement strategy to meet SB 956 targets for the GHG intensity of cement use.
 - Leverage energy efficiency and low carbon hydrogen programs.
 - Prioritize most vulnerable residents with the majority of funds in the new \$922 million Equitable Building Decarbonization program.
 - Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed by 2030.
 - Adopt a zero-emission standard for new space and water heaters sold in California beginning in 2030.
 - Implement biomethane procurement targets for investor-owned utilities as specified in SB 1440.
- Carbon Dioxide Removal and Capture
 - Implement SB 905.
 - Achieve the 85 percent reduction in anthropogenic sources below 1990 levels per AB 1279 by incorporating Carbon Capture and Storage (CCS) into sectors and programs beyond transportation.
 - Evaluate and propose the role for CCS in cement decarbonization and as part of hydrogen peroxide pathways.
 - Explore carbon capture application for zero-carbon power for reliability needs per SB 100.
- Short-Lived Climate Pollutants (Non-Combustion Gases)
 - Install anaerobic digesters to maximize air and water quality protection, maximize biomethane capture, and direct biomethane to specific sectors.
 - Increase alternative manure management projects.
 - Expand markets for products made from organic waste.
 - Pursuant to SB 1137, develop leak detection and repair plans for facilities in health protection zones, implement emission detection system standards, and provide public access to emissions data.
 - Convert large HFC emitters to the lowest practical global warming potential (GWP) technologies.
- Natural and Working Lands
 - Implement AB 1757 and SB 27.
 - Implement the Climate Smart Strategy.

- Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025.
- Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025, conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045.
- Restore 60,000 acres of Delta wetlands annually by 2045.
- Increase urban forestry investment annually by 200 percent, relative to business as usual.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008. Senate Bill (SB) 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires Metropolitan Planning Organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 32 and the 2017 Climate Change Scoping Plan Update. The Governor signed SB 32 in September 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that “In adopting rules and regulations to achieve the maximum technologically feasible and cost effective greenhouse gas emissions reductions authorized by this division, the State [air resources] board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030.” The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
 - Achieve 50 percent Renewables Portfolio Standard (RPS) by 2030.
 - Doubling of energy efficiency savings by 2030.
2. Low Carbon Fuel Standard
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million ZEVs on the roads.
 - Increase ZEV buses, delivery, and other trucks.
4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near-zero-emission vehicles and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.

5. Short-Lived Climate Pollutant Reduction Strategy
 - Reduce emissions of methane and HFCs 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Senate Bill 1368—Emission Performance Standards. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements of longer than 5 years for energy from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities, of 1,100 pounds CO₂ per MWh.

Senate Bill 1078—Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established an RPS target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23.

Senate Bill 350—Clean Energy and Pollution Reduction Act of 2015. The legislature recently approved, and the Governor signed, SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50 percent reduction in the use of

petroleum Statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024 and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrified transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.⁵⁶

Senate Bill 100—The 100 Percent Clean Energy Act of 2018. The legislation directs the CPUC, CEC, and the ARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. This Act amends Sections 399.11, 399.15, and 399.30 of, and adds Section 454.53 to, the Public Utilities Code relating to energy.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an Executive Order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07—Low Carbon Fuel Standard. The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, ARB, University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

⁵⁶ California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed October 24, 2022.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that the ARB failed to comply with CEQA and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two Executive Orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015, and September 25, 2015, where the LCFS regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015.⁵⁷

Executive Order S-13-08. Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy⁵⁸ was adopted, which is the “. . . first Statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. On April 29, 2015, Governor Edmund G. Brown Jr. issued an Executive Order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor’s Executive Order aligned California’s GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MT CO₂e. The Executive Order also requires the State’s climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions.

Executive Order N-79-20. Executive Order N-79-20 directs the State to require that, by 2035, all new cars and passenger trucks sold in California be zero-emission vehicles.⁵⁹

⁵⁷ California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: <https://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm>. Accessed October 24, 2022.

⁵⁸ California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy.

⁵⁹ Executive Department State of California. 2020. Executive Order N-79-20.

ARB Advanced Clean Cars II rule. Adopted by the ARB in August 2022, the Advanced Clean Cars II regulation supports the implementation of Executive Order N-79-20 and requires that by 2035, all new passenger cars, trucks and SUVs sold in California will be zero emissions.⁶⁰

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California’s energy consumption relatively flat even with rapid population growth.

California Code of Regulations Title 13: Motor Vehicles. California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.⁶¹ This measure seeks to reduce public exposure to DPM and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than 5 consecutive minutes at any location or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. This measure regulates NO_x, DPM, and other criteria pollutant emissions from in-use, off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or demonstrate that it has met “best available control technology” requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to 5 consecutive minutes or less.

Title 20 Appliance Efficiency Regulations. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards. California Code of Regulations Title 24 Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency

⁶⁰ California Air Resource Board (ARB). Proposed Advanced Clean Cars II Regulations. Website: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed October 20, 2022.

⁶¹ California Air Resources Board (ARB). Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Website: <https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about>. Accessed October 24, 2022.

reduces fossil fuel consumption and decreases GHG emissions. The current version of Title 24 adopted by the CEC went into effect on January 1, 2020. CEC recently approved the latest 2022 Energy Code, which will become effective on January 1, 2023.⁶²

Title 24 California Green Building Standards Code. California Code of Regulations Title 24 Part 11 code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the current version of the 2019 California Green Building Code Standards Code (CALGreen) that became effective January 1, 2020.⁶³ CEC recently approved the latest 2022 CALGreen Code, which will become effective on January 1, 2023.⁶⁴ Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

Model Water Efficient Landscape Ordinance. The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected for Ordinance. Governor Brown’s Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems.
- Incentives for graywater usage.
- Improvements in on-site stormwater capture.
- Limits on the portion of landscapes that can be planted with high water use plants.
- Reporting requirements for local agencies.

Senate Bill 97 and the CEQA Guidelines Revisions. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states “(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a).”

The 2010 CEQA Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the

⁶² California Energy Commission (CEC). 2022 Building Energy Efficiency Standards. Website: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>. Accessed September 2, 2022.

⁶³ State of California. 2020. California Green Building Standards Code (CALGreen).

⁶⁴ California Energy Commission (CEC). 2021. CEC Approves 2022 CALGreen Building Standards Code. Website: <http://calenergycommission.blogspot.com/2021/10/cec-approves-2022-calgreen-building.html>. Accessed September 2, 2022.

existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the CEQA Guidelines, which focuses on energy conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

The 2018 CEQA Amendments expanded upon the previous guidance by specifying that:

- The lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to Statewide, national, or global emissions. The agency’s analysis should consider a timeframe that is appropriate for the project. The agency’s analysis also must reasonably reflect evolving scientific knowledge and State regulatory schemes.
- In determining the significance of impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies address the project’s incremental contribution to climate change and its conclusion that the project’s incremental contribution is not cumulatively considerable.
- A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the project’s incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

California Supreme Court GHG Ruling

In a November 30, 2015, ruling, the California Supreme Court, in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project, concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25-27 of the ruling to address this issue summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU.** A lead agency may use a BAU comparison based on the Scoping Plan’s methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals (page 25).
- **Compliance with Regulatory Programs or Performance Based Standards.** A lead agency “might assess consistency with AB 32’s goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities” (page 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans.** A lead agency may utilize “geographically specific GHG emission reduction plans” such as Climate Action Plans (CAPs) or

GHG emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (page 26).

- **Compliance with Local Air District Thresholds.** A lead agency may rely on “existing numerical thresholds of significance for greenhouse gas emissions” adopted by, for example, local air districts (page 27).

The Supreme Court was concerned that new development may need to do more than existing development to reduce GHGs to demonstrate that it is doing its fair share of reductions.

3.3.4 - South Coast Air Quality Management District

The SCAQMD provides multiple options in its 2016 SCAQMD CEQA Guidelines for operational GHG emissions generation significance thresholds.

The proposed project is within the SoCAB. The SCAQMD works directly with SCAG, local governments, and State and federal agencies to attain and maintain air quality standards. The applicable air quality plan for the project is the SCAQMD’s 2016 AQMP.

SCAQMD Regulation XXVII, Climate Change

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a GHG Reduction Program for GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

3.3.5 - Local

City of Riverside General Plan

The City’s General Plan and the Chapter of “Open Space and Conservation Element” provides policies that aim to conserve energy and reduce GHG emissions.⁶⁵

Objective OS-8 Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1 Support the development and use of non-polluting, renewable energy sources.

⁶⁵ City of Riverside General Plan. 2012. Open Space and Conservation Element.

- Policy OS-8.2** Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24, and encourage the installation of conservation devices in existing developments.
- Policy OS-8.3** Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.
- Policy OS-8.4** Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.
- Policy OS-8.6** Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.
- Policy OS-8.7** Encourage mixed use development as a means of reducing the need for auto travel.
- Policy OS-8.8** Encourage the use of clean burning fuels and solar energy for space and water heating purposes and explore ways to participate in California New Solar Homes Partnerships.
- Policy OS-8.9** Encourage construction and subdivision design that allows the use of solar energy systems.
- Policy OS-8.10** Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of nonrenewable energy supplies.
- Policy OS-8.11** Support public education programs for City residents and businesses to provide information on energy conservation and on alternatives to nonrenewable energy sources.
- Policy OS-8.12** Require bicycle parking in new nonresidential development.
- Objective OS-9** Encourage the efficient use of energy resources by the City of Riverside.
- Policy OS-9.1** Encourage the most energy efficient design for local government facilities and equipment consistent with reasonable rate of return and the recognition of the environmental benefits from energy conservation.

City of Riverside General Plan EIR

The air quality impacts of implementation of the General Plan were evaluated in the General Plan EIR. The General Plan EIR provides the following relevant standard design measures to address impacts related to GHG emissions.⁶⁶

SDM Air 8 To reduce GHG emissions through reduced energy consumption and the procurement of lower-emission resources, Riverside Public Utilities (RPU) shall join the California Climate Action Registry (www.climateregistry.org) and comply with GHG regulations developed by the California Air Resources Board (ARB) and the California Energy Commission (CEC) pursuant to AB 32. RPU shall perform yearly GHG inventories according to the Power/Utility Protocol to identify and implement conservation measures and resource procurement practices that will reduce its GHG emissions.

SDM Air 9 To reduce GHG emissions, the City’s Environmental Relations Manager, working in conjunction with RPU shall develop, enhance, and/or implement programs to reduce energy consumption. Some examples of programs may be, but are not limited to:

- Replacing incandescent light bulbs with compact fluorescent lamps;
- Participating in the Energy Star Programs;
- Promotion of the use of energy efficient equipment and vehicles;
- Promotion of commercial and residential solar energy rebate programs;
- and
- Performance based, commercial/industrial energy efficiency rebate program.

The mitigation measures that would reduce GHG emissions and are relevant to the project listed above are directed at the City-level and are not applicable at the individual development level; therefore, no GHG measures listed in the General Plan EIR would be applicable to the proposed project. be

Hunter Business Park Specific Plan

The intent of the Specific Plan is to provide high quality industrial, commercial, and office land uses to serve the existing and future residents and business of the City of Riverside.⁶⁷ The project site is zoned for Business and Manufacturing Park Zone. This zone provides for light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous materials, and retail related to manufacturing.

⁶⁶ City of Riverside. 2007. General Plan and Supporting Documents EIR, Section 5.3 Air Quality.

⁶⁷ City of Riverside. 1988. Hunter Business Park Specific Plan. April.

Riverside Climate Action Plan

The City of Riverside adopted the Economic Prosperity Action Plan and CAP in January 2016 for the development and implementation of policies and programs to reduce GHG emissions within the City.⁶⁸ The CAP is based on the directives of AB 32 and Executive Order S-3-05 and uses a GHG emission inventory from the year 2010 to establish the City's baseline emissions for the purposes of assessing future GHG reduction goals and forecasting GHG emissions in the future. The CAP stated that, by 2020, the Statewide and local measures together would reduce the City's community GHG emissions from the 2020 BAU condition by approximately 39 percent or 67,668 MT CO₂e (from 173,195 to 105,527 MT of CO₂e). This reduction is equivalent to 20 percent decrease below the 2010 levels, which exceeds the 15 percent reduction target of the year 2020.

The City's CAP presented the following strategies that are relevant to the proposed project.

Measure SR-1: Renewables Portfolio Standard

Utilities must secure 33 percent of their power from renewable sources by 2020. Through a series of increasingly stringent bills first enacted in 2002, California has placed requirements on electric utilities to procure a portion of their energy from renewable sources. The standard, known as the Renewables Portfolio Standard (RPS), applies to investor-owned utilities, publicly owned utilities, electricity service providers, and community choice aggregators. Therefore, RPU must meet 40 percent of retail sales from renewables by 2035.

Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6)

Mandatory energy efficiency standards for buildings. Building energy efficiency standards are designed to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. Renewable energy is likely to play a major part in meeting those goals, but Title 24 will continue to impose more rigorous energy efficiency requirements over time. Measure SR-2 conservatively assumes that Title 24 will require a 30 percent improvement in energy efficiency over the current (2013) standard by 2035; it does not account for the renewable energy contribution toward zero-net-energy, as that is accounted for by other CAP measures.

Measure SR-4: HERO Commercial Program

Financing for business owners to make energy efficient, renewable energy, and water conservation improvements. The Home Energy Renovation Opportunity (HERO) Program is a public-private partnership administered by the Western Riverside Council of Governments (WRCOG), offering financing to business owners in the subregion for the installation of energy efficient, renewable energy, and water conservation improvements. This Property Assessed Clean Energy (PACE) financing program offers a continually expanding list of eligible products for financing and an ever-growing cadre of trained contractors who can assist property owners with selecting and installing eligible products. The HERO program is helping RPU meet its obligation under California's Assembly Bill (AB) 2021, which requires public energy utilities (including RPU) to reduce energy use by its customers by 10 percent over 10 years (to 2020). It also supports RPU's commitment to expanding solar installations in the City as an administrator of Senate Bill (SB) 1 that funds former Governor

⁶⁸ City of Riverside. 2016. Economic Prosperity Action Plan and Climate Action Plan. January.

Schwarzenegger’s Million Solar Roofs initiative, with a Statewide goal to install 3,000 megawatts of solar energy systems, and establish solar energy systems as a viable mainstream option for commercial buildings.

In 2002, California adopted AB 1493, referred to as “Pavley I,” which directed the ARB to develop fuel efficiency standards for passenger vehicles in California by 2005. Through a series of rulings, ARB and the federal government agreed on federal standards that began in 2009 and increased through 2016. The ARB and the federal government are currently finalizing fuel efficiency standards that continue to become increasingly stringent from 2017 through 2025. Building from Pavley 1, Executive Order S-1-07, known as the LCFS, requires the carbon intensity of California’s transportation fuel to be reduced by at least 10 percent by 2020.

Measure SR-6: Expansion of Metrolink

Identified in SCAG’s 2012 RTP/SCS, the Metrolink Perris Valley Line will be extended from Riverside to Perris in Western Riverside County, allowing for alternative transportation, reducing VMT and GHG emissions in Western Riverside County. Service along this route is expected to begin in 2015.

Measure SR-8: Express Lanes

Additional express lanes added along major freeways in Western Riverside County. SCAG’s analysis of critical corridors found inter-county trips account for over 50 percent of all trips. Ongoing congestion issues—and therefore increased idle time and GHG emissions—have led to SCAG proposing increasing the network of express lanes that connect counties, including Riverside County. Extension of express lanes along State Route (SR) 91 and Interstate-15 (I-15) would be operational by 2017 and 2020 respectively, and would lead to reduced congestion according to regional transportation modeling.

Measure SR-9: Congestion Pricing

Expansion of the toll lanes along the SR-91. Transportation Demand Management (TDM) consists of methods used to encourage transportation other than single-occupancy vehicle travel at peak traffic times. TDM strategies are generally categorized as “soft” or “hard” strategies. Soft mechanisms are incentive-based and include measures like preferential parking for carpoolers, while hard mechanisms are associated with pricing or an enforceable policy or ordinance.

Measure SR-10: Telecommuting

Work arrangement in which employees do not commute to a central place of work. Telecommuting is a soft TDM mechanism that has increased considerably over the past decade. According to SCAG, telecommuting could increase even more by 2020 (to 5 percent of workers in the region) and 2035 (to 10 percent of workers), from the current 2.6 percent that currently telecommute.

Measure SR-11: Goods Movement

Efficient movement of goods through inland Southern California. Southern California is a major hub for importing and exporting goods. SCAG estimates that over \$2 trillion in cargo was moved across the region in 2010 alone, much of which travels through inland Southern California, including Western Riverside County.

However, the many warehouses and distribution facilities employ non-passenger vehicles that contribute to GHG emissions. At the State level, more standards are being implemented to increase vehicle efficiencies and the 2012 RTP/SCS and AQMD are supporting greater penetration of low emission trucks in the region. While goods will continue to be moved to support local and regional economies, electrification and other low emission technologies installed in vehicles can reduce the GHG emissions of goods movement.

Measure SR-12: Electric Vehicle Plan and Infrastructure

Facilitate EV use by providing necessary infrastructure. SCAG has developed a regional plug-in electric vehicle (PEV) readiness plan, and WRCOG has a similar subregional plan for PEV readiness. Together, these plans identify viable locations for charging stations, changes to development codes, and other strategies to encourage the purchase and use of electric vehicles. PEV chargers are already being installed in the WRCOG subregion. Through these plans and outreach efforts, alternative fuel vehicles will be promoted as one strategy to reduce GHG emissions associated with passenger vehicles.

Measure SR-13: Construction and Demolition Waste Diversion

Meet mandatory requirement to divert 50 percent of Construction and Demolition (C&D) waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&D waste from landfills by 2035. Effective July 1, 2014, CALGreen, the State's Green Building Standards Code, requires jurisdictions to divert a minimum of 50 percent of their non-hazardous C&D waste from landfills. Reductions for the year 2020 assume that 100 percent of new construction and applicable retrofit projects meet the minimum diversion rates established by the State. For 2035, this measure assumes that C&D waste diversion would increase to 90 percent for new construction and retrofit projects. This increase is in line with Green Accountability Performance (GAP) Goal 6.A which aims to develop measures to encourage that a minimum of 90 percent of recoverable waste from all construction sites be recycled throughout Riverside by 2015, beginning with 40 percent in 2010 and increasing by 10 percent each year thereafter.

Measure T-19: Alternative Fuel and Vehicle Technology and Infrastructure

Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.

Measure T-20: Eco- Corridor/Green Enterprise Zone

Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused on supporting both clean-tech and green businesses.

SECTION 4: MODELING PARAMETERS AND ASSUMPTIONS

4.1 - Model Selection and Guidance

Regional air pollutant emissions are composed of those on-site and off-site construction and operational emissions generated from all facets of the proposed project. Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant over a given time or activity, for example, grams of NO_x per vehicle mile traveled or grams of NO_x per horsepower hour of equipment operation. The activity factor is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, the amount of fuel consumed in a given amount of time, or VMT per day. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factor (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) was developed in cooperation with the SCAQMD and other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses. To evaluate the proposed project's air quality impacts, regional construction and operational emissions reported in this analysis were modeled using CalEEMod Version 2020.4.0.⁶⁹ Air dispersion modeling was utilized to assess the proposed project's potential health risks using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the air dispersion model accepted by the EPA and the SCAQMD for preparing Health Risk Assessments (HRAs). Health risk calculations were completed using HARP2. EMFAC 2021 inventory data was utilized to calculate mobile source emissions for the HRA, as well as energy consumption from construction and operation of the proposed project.

4.2 - Air Pollutants and GHGs Assessed

4.2.1 - Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_x)
- Carbon monoxide (CO)
- Sulfur oxides (SO_x)
- Particulate matter less than 10 microns in diameter (PM₁₀)
- Particulate matter less than 2.5 microns in diameter (PM_{2.5})

⁶⁹ California Emissions Estimator Model (CalEEMod) Version 2022.1 was released for public use in May 2022, however, this version is still in soft release and not officially designated as the recommended emission model. Therefore, CalEEMod Version 2020.4.0 is used in this analysis.

Note that the proposed project would emit ozone precursors ROG and NO_x. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

The proposed project would emit ultrafine particles. However, there is currently no standard separate from the PM_{2.5} standards for ultrafine particles and there is no accepted methodology to quantify or assess the significance of such particles.

4.2.2 - Toxic Air Containments Assessed

In this analysis, DPM would be assessed as exhaust emissions of PM₁₀ to evaluate the potential health risks resulting from the use of diesel trucks during the operation of the proposed project. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel, and the health effects are presented in Section 2.2.3, Toxic Air Containments.

4.2.3 - Greenhouse Gases Assessed

This analysis is restricted to GHGs identified by AB 32, which include carbon dioxide, methane, N₂O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

The project may emit GHGs that are not defined by AB 32. For example, the project may generate aerosols through emissions of DPM from the vehicles and trucks that would access the project site. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high GWP; however, the IPCC states that it has a low level of scientific certainty.⁷⁰

Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities.

The proposed project would emit NO_x and VOCs, which are ozone precursors. Ozone is a GHG; however, unlike the other GHGs, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain GHGs defined by AB 32 would not be emitted by the proposed project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the proposed project would emit perfluorocarbons or sulfur hexafluoride.

⁷⁰ Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller [eds.]).

4.3 - Modeling Assumptions

4.3.1 - Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}).

Construction activities for activities occurring on the 13.60-acre project site would consist of demolition of existing structures and pavement, site preparation, grading, building construction, paving, and architectural coating of the inside and outside of the building. In addition, frontage improvements for approximately 0.56 acre would involve grading, paving, and architecture coating. For each construction activity, the construction equipment operating hours and numbers represent the average equipment activity over the duration of the activity. A conceptual construction schedule is provided in Table 5 that presents the duration for each construction activity. Table 6 presents the number of assumed construction equipment along with hours of operation per day, horsepower, and load factor. Where project-specific information was not available or unknown, default assumptions were used to complete emissions modeling. Where the CalEEMod default schedule was compressed to match applicant provided information, the construction equipment usage was increased proportionally to retain the CalEEMod default horsepower (hp) hours (see Appendix A). The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

The anticipated construction schedule, as shown in Table 5, reflects the construction start date and construction phase durations assumed for the purposes of this environmental analysis. Based on applicant provided information, construction would be completed in one phase, beginning in fourth quarter 2023. The project is expected to be operational in the third quarter of 2024. The construction schedule used in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases due to improvements in technology and compliance with more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by the CEQA Guidelines.

Table 5: Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days per Week	Working Days
	Start Date	End Date		
Project Site (Scenarios 1 and 2)				
Demolition	11/20/2023	12/15/2023	5	20
Grading	11/20/2023	12/15/2024	5	20
Building Construction	12/18/2024	09/20/2024	5	200
Paving	07/29/2024	08/23/2024	5	20
Architectural Coating	08/26/2024	09/20/2024	5	20
Frontage Improvements (Scenarios 1 and 2)				
Grading	11/27/2023	11/28/2023	5	2
Paving	12/06/2023	12/12/2023	5	5
Architectural Coating	12/13/2023	12/19/2023	5	5
Source: CalEEMod Output (Appendix A).				

A summary of the on-site, off-road construction equipment usage assumptions used to estimate emissions is presented in Table 6. The building construction phase is shortened compared with the CalEEMod default schedule, and the equipment numbers or usage hours are therefore increased to have the same horsepower hours as that of the default CalEEMod equipment usage. The usage adjustment is included in the appendix.

Table 6: Project Construction Equipment Assumptions

Construction Activity	Equipment	Equipment Amount	Average Hours per Day	Horsepower	Load Factor
Project Site Construction (Scenarios 1 and 2)					
Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber Tired Bulldozers	2	8	247	0.4
Grading	Excavators	2	8	158	0.38
	Graders	1	8	187	0.41
	Rubber Tired Bulldozers	1	8	247	0.4
	Scrapers	2	8	367	0.48
	Tractors/Loaders/Backhoes	2	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74

Construction Activity	Equipment	Equipment Amount	Average Hours per Day	Horsepower	Load Factor
	Tractors/Loaders/Backhoes	3	7	231	0.37
	Welders	1	8	46	0.45
	Paving	Pavers	2	8	130
	Paving Equipment	2	8	132	0.36
	Rollers	2	8	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48
Frontage Improvements (Scenarios 1 and 2)					
Grading	Graders	1	6	187	0.41
	Rubber Tired Bulldozers	1	6	247	0.40
	Tractors/Loaders/Backhoes	1	7	97	0.37
Paving	Pavers	1	7	130	0.42
	Rollers	1	7	80	0.38
	Cement and Mortar Mixers	4	6	9	0.56
	Tractors/Loaders/Backhoes	1	7	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

Source: CalEEMod Output (Appendix A).

A summary of the construction-related vehicle trips is shown in Table 7. Based on project applicant provided information, during site preparation and grading would require up to 24,000 net cubic yards of fill to be exported. CalEEMod default values for trip lengths and vehicle fleets were used. Note that the total number of off-site construction vehicle trips would not necessarily occur on the same day since construction activities would vary each day during the construction period.

Based on applicant provided information, the proposed project would be composed of tilt-up wall concrete panels with pre-finished metal components on the exterior. Therefore, the architecture coating area was reduced 50 percent in the modeling to represent minimum coating needed for the proposed project.

Table 7: Construction Off-site Trips

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Trips per Day)
Project Site Construction (Scenario 1)			
Demolition	15	0	1,410
Grading	20	0	3,000
Building Construction	251	98	0
Paving	15	0	0

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Trips per Day)
Architectural Coating	50	0	0
Project Site Construction (Scenario 2)			
Demolition	15	0	1,410
Grading	20	0	3,000
Building Construction	248	97	0
Paving	15	0	0
Architectural Coating	50	0	0
Frontage Improvements (Scenarios 1 and 2)			
Grading	8	0	0
Paving	18	0	0
Architectural Coating	2	0	0
Source: CalEEMod Output (Appendix A).			

Fugitive Dust

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from bulldozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Every project within the SCAQMD’s jurisdiction is required to comply with the requirements of SCAQMD Rule 403 (Fugitive Dust). SCAQMD Rule 403 requires fugitive dust generating activities follow Best Available Control Measures to reduce emissions of fugitive dust. As shown in Table 8, per SCAQMD guidance, the Rule 403 measures are accounted for in CalEEMod through selection of the appropriate mitigation measures in CalEEMod. Development of the proposed project would include design features which would reduce fugitive dust compared to default values. Note that CalEEMod nominally treats these design elements and conditions as “mitigation measures” despite their inclusion in the project description.

Table 8: Best Available Control Measures

Best Available Control Measure	Associated Measure in CalEEMod
Clearing and Grubbing	
02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing.	Water exposed surfaces three times per day
02-2 Stabilize soil during clearing and grubbing activities.	
02-3 Stabilize soil immediately after clearing and grubbing activities.	

Best Available Control Measure		Associated Measure in CalEEMod
Earthmoving Activities		
08-1	Pre-apply water to depth of proposed cuts	Water exposed surfaces three times per day
08-2	Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction	
08-3	Stabilize soils once earthmoving activities are complete	
Import/Export of Bulk Materials		
09-1	Stabilize material while loading to reduce fugitive dust emissions.	Water exposed surfaces three times per day
09-3	Stabilize material while transporting to reduce fugitive dust emissions.	
09-4	Stabilize material while unloading to reduce fugitive dust emissions.	
Landscaping		
10-1	Stabilize soils, materials, slopes	Water exposed surfaces three times per day
Staging Areas		
13-1	Stabilize staging areas during use by limiting vehicle speeds to 15 mph.	Reduce speed on unpaved roads to 15 mph
Traffic Areas for Construction Activities		
15-1	Stabilize all off-road traffic and parking areas.	Water exposed surfaces three times per day
Source of Best Available Control Measures: South Coast Air Quality Management District (SCAQMD). 2005. Rule 403—Fugitive Dust. Amended June 3, 2005. Source of associated CalEEMod measures: CalEEMod Output (Appendix A).		

4.3.2 - Operation

The major sources of operational emissions that would occur over the long-term operations of the project are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from and within the project site. The regional emissions from the project’s mobile sources were estimated using CalEEMod. The proposed project would primarily generate passenger vehicle trips from employees and visitors traveling to and from the project site; however, the proposed project would also be served with daily van and truck deliveries. An estimate of the number of vehicle trips that the proposed project would generate was presented in the Trip Generation Assessment, as shown in Table 9.

Table 9: Vehicle Trip Generation During Operations (Daily)

Vehicle Type	Actual
Scenario 1	
Passenger Cars	296
Trucks ¹	160
Scenario 1 Total Project Trips	456
Scenario 2	
Warehouse Land Use Trucks ¹	108
Warehouse Land Use Passenger Cars	198
Manufacturing Land Use Trucks ¹	28
Manufacturing Land Use Passenger Cars	264
Scenario 2 Total Project Trips	598
Notes:	
¹ Based on the traffic study, trucks include 16.7 percent 2-Axle trucks, 20.7 percent 3-Axle trucks, and 62.6 percent 4-Axle trucks.	
Please refer to Appendix A for the trip generation adjustment.	
Source: Urban Crossroad. 2022. Palmyrita Warehouse Project Trip Generation Assessment. October.	

Industrial land use projects, including warehouse projects, can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod (7.9 miles to 18.5 miles for the SoCAB portion of Riverside County). To estimate mobile source emissions from trucks during project operations, a one-way truck trip length of 50 miles was assumed to provide a conservative estimate of emissions. The CalEEMod fleet mix is adjusted based on the number of trucks and passenger cars from Traffic Memorandum. The number of daily operational vehicle trips used to estimate emissions were the estimated daily trips presented in Table 9, with a fleet mix of 16.7 percent two-axle trucks, 20.7 percent three-axle trucks, and 62.6 percent four-or-plus axle trucks, as contained in the Trip Generation Assessment.⁷¹

Emission factors are assigned to the expected vehicle mix as a function of vehicle age, vehicle class, speed, and fuel type. The overall operational fleet mix used to assess emissions from the proposed project is shown below in Table 10.

Table 10: Vehicle Type Classification—Project Operational Fleet Mix

Vehicle Type	Classification	Fleet Mix Applied in the Modeling
Passenger Vehicles	LDA	59.4%
	LDT1	6.2%
	LDT2	19.1%

⁷¹ Urban Crossroad. 2022. Palmyrita Warehouse Project Trip Generation Assessment. October.

Vehicle Type	Classification	Fleet Mix Applied in the Modeling
	MDV	15.3%
	<i>Passenger Vehicle Fleet Mix</i>	<i>100%</i>
Trucks	LHD1	13.2%
	LHD2	3.7%
	MHD	20.6%
	HHD	62.5%
	<i>Truck Fleet Mix</i>	<i>100%</i>
Notes: HHDT = Heavy Heavy-Duty Truck LDA = Light-Duty Auto LDT = Light-Duty Truck MDV = Medium-Duty Vehicle Source: Traffic Analysis and CalEEMod default fleet mix. CalEEMod Output (Appendix A).		

Other Emission Sources

Area Sources

In addition to typical mobile- and energy-source emissions, long-term operational emissions also include area-source emissions. Area-source emissions include occasional architectural coating activities for repainting and maintenance of the warehouse building associated with the proposed project. CalEEMod assumes that repainting occurs at a rate of 10 percent of the buildings per year. Therefore, on average, it is assumed that the building would be fully repainted every 10 years.

Other area-source emissions include consumer products that involve solvents that emit VOCs during use. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses. Lastly, CalEEMod default emission factors for landscape maintenance equipment were used in this analysis.

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant.

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project site. For solid waste disposal, CalEEMod calculates GHG emissions generated as solid waste generated by the proposed project decomposes in a landfill.

For electricity-related emissions, CalEEMod contains default electricity intensity factors for various utilities throughout California. The default factors applied in this analysis include CO₂ (390.983 lb/MWh), CH₄ (0.033 lb/MWh), and N₂O (0.004 lb/MWh).⁷²

Vegetation

The project site is currently occupied by a small-scale manufacturing facility occupied by BarretteWood USA and Barrette Outdoor Living but has no active operation. The project site has a small amount of vegetation. Therefore, there is currently some carbon sequestration occurring on-site. The project applicant proposes to plant trees and integrate landscaping into the project design, which would provide carbon sequestration. However, the number of trees to be planted is unknown and data are insufficient to accurately determine the impact that the existing landscaping has on carbon sequestration. For this analysis, it was assumed that the loss and addition of carbon sequestration that are due to the proposed project would be balanced; therefore, emissions due to carbon sequestration were not included.

Stationary Sources

Based on the information provided by the project applicant, the proposed project would include one stationary source in the form of a fire pump. The fire pump is presumably for fire protection purposes. To present a conservative estimate of emissions, the fire pump is assumed to be 250 horsepower and tested every month, which totals 50 hours per year.⁷³

⁷² Urban Crossroad. 2022. Palmyrita Warehouse Project Trip Generation Assessment. October.

⁷³ National Fire Protection Association (NFPA). 2022. Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems. Website: <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=25>. Accessed October 17, 2022.

SECTION 5: AIR QUALITY IMPACT ANALYSIS

This section calculates expected emissions from project construction and operation as a necessary requisite for assessing the regulatory significance of project emissions on a regional and local level. The methodology follows the SCAQMD CEQA and Federal Conformity Guidelines, which set forth recommended thresholds of significance and analysis methodologies and provides guidance on mitigating significant impacts.

5.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine whether a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the proposed project must be evaluated.

While the final determination of whether a project is significant is within the purview of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines, the SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the lead agency finds that the proposed project has the potential to exceed these air pollution thresholds, the proposed project would be considered to have significant air quality impacts.

5.1.1 - Thresholds of Significance

This analysis uses the air quality significance thresholds contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the proposed project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan.
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.
- c) Expose sensitive receptors to substantial pollutant concentrations.
- d) Create objectionable odors affecting a substantial number of people.

While the final determination of whether a project is significant is within the purview of the lead agency pursuant to Section 15064(b) of the CEQA Guidelines, the SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If a lead agency finds that a proposed project has the potential to exceed these air pollution thresholds, the proposed project should be considered to have significant air quality impacts. The applicable SCAQMD thresholds and methodologies are contained under each impact statement below.

5.2 - Impact Analysis

5.2.1 - Consistency with Air Quality Management Plan

Impact AIR-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis

A potentially significant impact to air quality would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The project is located within the jurisdiction of the SCAQMD. The SCAQMD is responsible for preparing air quality attainment plans to be transmitted to the ARB and the EPA for incorporation into the SIP. SCAQMD has designated this area as extreme nonattainment for ozone and serious nonattainment for PM_{2.5}.⁷⁴ To evaluate whether or not a project conflicts with or obstructs implementation of the applicable air quality plan (2016 AQMP for SoCAB), the SCAQMD CEQA Air Quality Handbook states that there are two key indicators. These indicators are identified by the criteria discussed below.

- **Indicator:** Whether the proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- **Indicator:** According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a proposed project is inconsistent with the growth assumptions incorporated into the air quality plan and, thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address this potential impact:

- **Criterion 1:** Proposed project's contribution to air quality violations (SCAQMD's first indicator);
- **Criterion 2:** Assumptions in AQMP (SCAQMD's second indicator); and
- **Criterion 3:** Compliance with applicable emission control measures in the AQMPs.

Criterion 1: Project's Contribution to Air Quality Violations

According to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.⁷⁵

If a project's emissions do not exceed the SCAQMD regional thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}, it follows that the project's emissions would not exceed the allowable limit for each project

⁷⁴ South Coast Air Quality Management District (SCAQMD). 2016. Air Quality Management Plan.

⁷⁵ South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

in order for the region to attain and maintain ambient air quality standards, which is the primary goal of air quality plans. As shown in Impact AIR-2, the proposed project would not exceed the SCAQMD's regional thresholds of significance during construction or operation. Furthermore, the standard design measures shown in Impact AIR-2 would ensure this impact to be less than significant.

Criterion 2: Assumptions in AQMP

The development of emission burdens used in AQMPs to demonstrate compliance with ambient air quality standards is based, in part, on land use patterns contained within local general plans. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and the general plan was adopted prior to the applicable AQMP, then the growth of VMT and/or population generated by said project would be consistent with growth in VMT and population assumed within the AQMP.

The project site has a land use designation of Business/Office Park by the City of Riverside General Plan 2025. The project site is zoned as Business and Manufacturing Park Zone, which allows for land uses such small-scale warehouses, light manufacturing; and support commercial. The land use designation and zoning were the same at the time the 2016 AQMP was prepared, and the project does not include a general plan amendment. Therefore, the proposed project's VMT, service population, and sources of air pollutants would have been reasonably analyzed in the 2016 AQMP. Furthermore, due to the industrial nature of the project, there would be no significant impacts associated with growth inducement from development of the proposed project. It follows that the project would not result in growth and associated emissions unforeseen in any local or regional plans. Therefore, the proposed project would not be significant regarding the second criterion.

Criterion 3: Control Measures

The AQMP contains several control measures which are enforceable requirements through the adoption of rules and regulations. SCAQMD rules and regulations relevant to the proposed project are described in Section 2.4.2. The proposed project would comply with all applicable SCAQMD rules and regulations. Because of the nature of the proposed project, which includes earthmoving activity, SCAQMD Rule 403 applies. As previously mentioned, Rule 403 governs emissions of fugitive dust during construction and operation activities. The rule requires that fugitive dust be controlled with Best Available Control Measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Compliance with this rule is achieved through application of standard BMPs. These BMPs include application of water or chemical stabilizers to disturbed soils; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 mph; sweeping loose dirt from paved site access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. The proposed project's compliance with all applicable SCAQMD rules and regulations would result in consistency with the applicable AQMP control measures.

Summary

In summary, the proposed project would not exceed the growth assumptions in the AQMP. The proposed project would not result in a regional exceedance of criteria air pollutants. Furthermore, the proposed project would comply with all applicable SCAQMD rules and regulations. Therefore, this impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than significant impact.

5.2.2 - Cumulative Impacts

Impact AIR-2:	The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality (including releasing emissions which exceed quantitative thresholds for ozone precursors).
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Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. As described above, the region is currently nonattainment for ozone, PM₁₀, and PM_{2.5}. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional air quality plans would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable.

Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered

consistent with regional air quality planning efforts would not generate cumulatively considerable emissions.

The proposed project's regional construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. Construction and operational emissions from the proposed project were estimated using CalEEMod Version 2020.4.0. A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are contained in Appendix A.

Cumulative Construction Emissions

Construction emissions are described as “short-term” or temporary in duration; however, they have the potential to represent a significant impact with respect to air quality. Construction of the proposed project would result in the temporary generation of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from construction activities such as site preparation, grading, building construction, architectural coating, and asphalt paving. Fugitive dust emissions are primarily associated with earth disturbance and grading activities and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on-site and off-site. Construction-related NO_x emissions are primarily generated by exhaust emissions from heavy-duty construction equipment, material and haul trucks, and construction worker vehicles. VOC emissions are mainly generated by exhaust emissions from construction vehicles, off-gas emissions associated with architectural coatings, and asphalt paving.

The project construction is assumed to be completed in one phase, beginning in fourth quarter 2023 and concluding in third quarter 2024. The proposed project is expected to be operational after the completion of construction. The anticipated construction schedule reflects the construction start date and the construction phase durations estimated by the project applicant. The construction schedule used in the analysis represents a reasonable worst-case analysis scenario since a delay in construction dates into the future would result in using emission factors for construction equipment that decrease as the analysis year increases, due to improvements in technology and the need to meet more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by CEQA Guidelines. For a more detailed description of the construction emissions modeling parameters and assumptions, please refer to Section 4-Modeling Parameters and Assumptions.

Table 11 presents the proposed project's maximum daily construction emissions during the entire construction duration using the worst-case summer or winter daily construction-related criteria pollutant emissions for each phase of construction. Complete CalEEMod output files are included as part of Appendix A.

Table 11: Construction Maximum Daily Emissions by Construction Year

Construction Year	Regional Pollutant Emissions (pounds per day)					
	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Scenario 1						
Maximum Daily Emissions¹	72.28	89.64	63.30	0.24	19.33	7.45
Year	2024	2023	2023	2023	2023	2023
Season	Summer	Winter	Summer	Summer	Winter	Winter
Scenario 2						
Maximum Daily Emissions¹	63.01	89.64	63.30	0.24	20.81	7.81
Year	2024	2023	2023	2023	2023	2023
Season	Summer	Winter	Summer	Summer	Winter	Winter
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter SO _x = sulfur oxides VOC = volatile organic compound ¹ Assumes overlap of construction activities based on schedule presented in Appendix A. The PM ₁₀ and PM _{2.5} emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403. Source of Table: Appendix A.						

As shown in above in Table 11, the proposed project’s construction emissions for Scenario 1 and Scenario 2 would not exceed the applicable significance threshold for any of the pollutants. Therefore, the proposed project would have a less than significant impact related to air quality during project construction.

Cumulative Operational Emissions

Following project construction, long-term operational emissions would be generated, resulting from daily operations. Operational emissions for land use development projects are typically distinguished as mobile-, area-, and energy-source emissions. Mobile source emissions are those associated with automobiles that would travel to and from the project site. Assumptions used to estimate mobile source emissions that would be generated by the proposed project were consistent with those presented in the project-specific traffic study. The proposed project was estimated to generate 296 daily passenger vehicle trips and 160 daily truck trips during the operation under Scenario 1, and 462 daily passenger vehicle trips and 136 daily truck trips during the operation under Scenario 2. Area-source emissions are those associated with natural gas combustion for space and water heating, landscape maintenance activities, and periodic architectural coatings. Energy-source emissions are those associated with electricity consumption and are more pertinent for GHG emissions than air

quality pollutants. Stationary source emissions are from a fire pump based on the information provided by the project applicant. Table 12 presents the project’s maximum daily operational emissions.

Table 12: Maximum Daily Operational Regional Pollutants

Operational Activity	Regional Pollutant Emissions (pounds per day) ¹					
	VOC	NO _x	CO	SO _x	PM ₁₀ (Total)	PM _{2.5} (Total)
Scenario 1						
Area	6.05	<0.01	0.03	–	<0.01	<0.01
Energy	0.02	0.15	0.13	<0.01	0.01	0.01
Mobile	1.06	30.69	14.41	0.20	10.30	3.10
Stationary (Fire Pump)	0.06	0.16	0.15	<0.01	0.01	0.01
Season	Summer	Winter	Summer	Summer	Winter	Winter
Overall Maximum Daily	7.19	31.00	14.71	0.21	10.32	3.12
Scenario 2						
Area	5.57	<0.01	0.03	–	<0.01	<0.01
Energy	0.07	0.63	0.53	<0.01	0.05	0.05
Mobile	1.30	29.73	16.75	0.20	10.81	3.23
Stationary (Fire Pump)	0.06	0.16	0.15	<0.01	0.01	0.01
Season	Summer	Winter	Summer	Summer	Winter	Winter
Overall Maximum Daily	7.00	30.52	17.45	0.21	10.86	3.28
SCAQMD Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter SO _x = sulfur oxides VOC = volatile organic compound ¹ Emissions shown represent the maximum daily emissions from summer and winter seasons for each operational emission source and pollutant. Therefore, total daily operational emissions represent maximum daily emissions that could occur throughout the year. Source of Table: Appendix A.						

As shown in Table 12, the project’s regional daily operational emissions for Scenario 1 and Scenario 2 would not exceed any of the SCAQMD thresholds of significance. Additionally, the proposed project would be required to comply with applicable mitigation measures identified in the City’s General Plan EIR. It should be noted that this technical report fulfills the project-level requirements under General Plan EIR SDM Air 1 and SDM Air 7. Therefore, the proposed project would have less than significant impact related to air quality during project operation.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

Applicable General Plan EIR Standard Design Measures

- SDM Air 1** To mitigate for potential adverse impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available Urban Emissions (URBEMIS) model, or other methods sanctioned by the South Coast Air Quality Management District (SCAQMD). The analysis of construction-related air quality impacts shall be included in the development project's CEQA analysis, including recommended mitigation measures. Proposed mitigation measures may include extending the construction period as feasible in order to ensure air quality thresholds are not exceeded. The analysis shall address pollution levels near sensitive receptors and require mitigation to reduce emissions.
- SDM Air 2** To mitigate for potential adverse impacts resulting from construction activities, development projects must abide by the South Coast Air Quality Management Districts (SCAQMD) Rule 403 concerning Best Management Practices (BPMs) for construction sites in order to reduce emissions during the construction phase. Measures may include:
- Development of a construction traffic management program that includes, but is not limited to, rerouting construction-related traffic off congested streets, consolidating truck deliveries, and providing temporary dedicated turn lanes for movement of construction traffic to and from site;
 - Sweep streets at the end of the day if visible soil material is carried onto adjacent paved public roads;
 - Wash off trucks and other equipment leaving the site;
 - Replace ground cover in disturbed areas immediately after construction;
 - Keep disturbed/loose soil moist at all times;
 - Suspend all grading activities when wind speeds exceed 25 miles per hour;
 - Enforce a 15-mile per hour speed limit on unpaved portions of the construction site.
- SDM Air 4** To reduce diesel emissions associated with construction, construction contractors shall provide temporary electricity to the site to eliminate the need for diesel-powered electric generators, or provide evidence that electrical hook ups at construction sites are not cost effective or feasible.
- SDM Air 5** To reduce construction-related particulate matter air quality impacts of City projects, the following measures shall be required:

1. The generation of dust shall be controlled as required by the South Coast Management District (SCAQMD).
2. Grading activities shall cease during periods of high winds (greater than 25 mph).
3. Trucks hauling soil, dirt or other emissive materials shall have their loads covered with a tarp or other protective cover as determined by the City Engineer.
4. The contractor shall prepare and maintain a traffic control plan, prepared, stamped and signed by either a licensed Traffic Engineer or a Civil Engineer. The preparation of the plan shall be in accordance with Chapter 5 of the latest edition of the Caltrans Traffic Manual and the State Standard Specifications. The plan shall be submitted for approval by the engineer at the preconstruction meeting. Work shall not commence without an approved traffic control plan.

The following mitigation measures shall be implemented to address long-term operational impacts:

SDM Air 7 As part of the CEQA process, the City shall require proposed development projects with potential operational air quality impacts to identify and mitigate those impacts. To ensure proper characterization and mitigation of those impacts, regional impacts shall be analyzed using the latest available Urban Emissions (URBEMIS) model, or other analytical method determined in conjunction with the South Coast Air Quality Management District (SCAQMD). To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, carbon monoxide (CO) Hot Spot analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation. Mitigation should reduce identified impacts to the maximum extent feasible using, among others, measures identified in the Air Quality Element Policies of the General Plan and the most recent Air Quality Management Plan (AQMP) as well as mitigation from the most recent CEQA Air Quality Handbook available at the SCAQMD. Example topics include, but are not limited to, energy conservation, reduction of Vehicle Miles Traveled (VMT), overall trip reduction, and reduction of particulate matter.

Project-specific Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than significant impact.

5.2.3 - Sensitive Receptors

Impact AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis

This impact evaluates the potential for the proposed project's construction and operational emissions to expose sensitive receptors to substantial pollutant concentration. Sensitive receptors are defined as those individuals who are sensitive to air pollution, including children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities.⁷⁶ Commercial and industrial facilities are not included in the definition because no individual employee typically remains on-site for 24 hours at a time. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as NO₂ and CO), commercial and/or industrial facilities would be considered sensitive receptors. For the proposed project, the closest off-site sensitive receptor is a single-family home located approximately 850 feet north of the project site.

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** Localized significance threshold (LST) assessment: emissions and air quality impacts during project construction or operation must be below the applicable LSTs to screen out of needing to provide a more detailed air quality analysis. If the proposed project exceeds any applicable LST when the mass rate lookup tables are used as a screening analysis, then project-specific air quality modeling may be performed to determine significance.
- **Criterion 2:** A CO hotspot assessment must demonstrate that the proposed project would not result in the development of a CO hotspot that would result in an exceedance of the CO ambient air quality standards.
- **Criterion 3:** TAC analysis must demonstrate that TAC emissions from construction and operations of the proposed project would not result in significant health risk impacts to existing or proposed sensitive receptors.

Criterion 1: Localized Significance Threshold Analysis—Criteria Pollutants

The localized construction and operational analyses use thresholds (i.e., LSTs) that represent maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard.⁷⁷ If the proposed project's construction or operational emissions are under those thresholds, it follows that the project would

⁷⁶ South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. Revised July 2008. Website: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed October 24, 2022.

⁷⁷ South Coast Air Quality Management District (SCAQMD). Revised October 21, 2009. Final Localized Significance Threshold Methodology, Appendix C. Website: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>. Accessed October 24, 2022.

not cause or contribute to an exceedance of the standard and would not expose sensitive receptors to substantial pollutant concentrations.

Localized Construction Analysis

The LST Methodology only applies to on-site emissions and states that “off-site mobile emissions from the project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the construction LST analysis, only on-site emissions were compared with the applicable LSTs.

Utilizing the construction equipment list and associated acreages per 8-hour day provided in the SCAQMD “Fact Sheet for Applying CalEEMod to Localized Significance Thresholds,” the maximum number of acres disturbed in a day would be 3.5 acre per day. Scenario 1 and Scenario 2 have the same number of equipment and working hours, therefore, Table 13 represents the maximum daily disturbed area for both scenarios. As shown in Table 13, the maximum daily area disturbed is 3.5 acres for both scenarios, given that demolition and grading occur at the same time. Additionally, frontage construction covers 0.56 acre and could be disturbed during the same grading phase with the main site construction. To ensure a conservative analysis, 2-acre LST is utilized in the localized construction analysis.

Table 13: Maximum Number of Acres Disturbed Per Day

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Demolition	Excavators	3	0.5	1.5
	Rubber Tired Bulldozers	2	0.5	1.0
Grading	Graders	1	0.5	0.5
	Rubber Tired Bulldozers	1	0.5	0.5
	Tractors/Loaders/Backhoes	2	0.0	0.0
Maximum Number of Acres Disturbed Per Day				3.5
Notes: Source: CalEEMod output and SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.				

Table 14 presents the proposed project’s maximum daily on-site emissions compared with the applicable LSTs. As described previously, the closest sensitive receptor is 850 feet north from the closest project boundary, which is 259 meters. To make a conservative estimate, the LSTs have been obtained from the LST Methodology for a 2-acre project site located in Source Receptor Area (SRA) 23 where sensitive receptors are 200 meters away. As noted in Table 14, emission estimates account for implementation of SCAQMD Rule 403, and the construction vehicle trip lengths were adjusted to 0.25 mile to represent localized emissions.

Table 14: Construction Localized Significance Screening Analysis

Activity	On-site Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Scenario 1				
Maximum Daily Emissions¹	71.55	59.26	14.70	6.02
Year	2023	2023	2023	2023
Scenario 2				
Maximum Daily Emissions¹	71.55	59.26	14.70	6.02
Year	2023	2023	2023	2023
Localized Significance Threshold (SRA 23, 2-acre site, 200 meters)	379	5,136	75	23
Exceed Threshold?	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less PM _{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers ¹ Assumes overlap of construction activities based on schedule presented in Table 5. The PM ₁₀ and PM _{2.5} emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403. Source of emissions: Appendix A. Source of thresholds: South Coast Air Quality Management District 2009, for SRA 23, 2-acre site, 200 meters from nearest sensitive receptor.				

As shown in Table 14, the proposed project’s maximum daily on-site emissions would not exceed the applicable SCAQMD LSTs for NO_x, CO, PM₁₀ and PM_{2.5}. Additionally, it should be noted that LSTs based on shorter averaging periods—such as the NO_x and CO LSTs—could also be applied to receptors such as industrial or commercial facilities, and not just to sensitive receptors like residences, since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours. In this analysis, the closest commercial facilities are approximately 30 meters east of the project site. The 2-acre site and 25-meter LST for NO_x and CO are 170 and 883 pounds per days, and the localized NO_x and CO emissions shown in Table 14 are well below the LST. Therefore, localized construction impacts related to these air pollutants would be less than significant.

Localized Operational Analysis

Similar to the construction LST analysis above, the applicable operational LSTs were obtained for a project located in SRA 23 with the nearest sensitive receptor being 200 meters away. Long-term operations would occur for the proposed project on the 13.60-acre project site, and LSTs were obtained for a 2-acre site.

As described above, the LST Methodology recommends that only on-site emissions are evaluated using LSTs. Because most of the proposed project’s mobile source emissions would occur on the

local and regional roadway network away from the project site, truck trip emissions and on-site area, energy, and mobile source emissions were included in this analysis. A trip length of 0.5 mile was used in the modeling input assumptions to account for on-site emissions and from mobile sources. The 0.5-mile on-site trip length is a conservative estimate that takes into account the maximum project site distance a vehicle could travel, not the most likely or fastest route, to ensure all potential impacts are considered. Table 15 presents the project’s maximum daily on-site emissions compared with the appropriate LSTs.

Table 15: Operational Localized Screening Significance Analysis

Emissions Source	Pounds per Day			
	NO _x	CO	PM ₁₀	PM _{2.5}
Scenario 1				
Area	0.00	0.03	0.00	0.00
Energy	0.15	0.13	0.01	0.01
On-site Mobile	2.84	3.84	0.26	0.08
Stationary	0.16	0.15	0.01	0.01
Daily Maximum	3.15	4.14	0.28	0.10
Scenario 2				
Area	0.00	0.03	0.00	0.00
Energy	0.63	0.53	0.05	0.05
On-site Mobile	2.52	4.42	0.29	0.08
Stationary	0.16	0.15	0.01	0.01
Daily Maximum	3.31	5.13	0.35	0.14
Maximum in Either Scenario				
Daily Maximum	3.31	5.13	0.35	0.14
Localized Significance Thresholds (SRA 23, 2-acre site, 200 meter)	379	5,136	18	6
Exceeds Screening Threshold?	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter Source of Emissions: Appendix A. Source of thresholds: SCAQMD Mass Rate Lookup Tables for a 2-acre site in SRA 23 for sensitive receptors located 200 meters from the project site.				

As shown in Table 15, the proposed project’s maximum daily on-site operational emissions for both Scenario 1 and Scenario 2 would not exceed any applicable SCAQMD LSTs. Therefore, the proposed project’s operational activities would not cause or contribute substantially to an existing or future

ambient air quality standard violation. Accordingly, the proposed project's operational criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

Criterion 2: Carbon Monoxide Hotspot Analysis

As identified in the Traffic Analysis, the project would generate up to 46 trips in the AM peak-hour and 50 trips in the PM peak-hour for.⁷⁸ The Traffic Analysis determined that the proposed project would generate up to 456 average daily trips, including trucks and passenger cars. As described in the Traffic Analysis, project-generated passenger car and truck trips would be distributed throughout the day and would not impact local roadways at one time, further reducing the potential impacts to CO. As a result, none of the intersections near the project site would have peak-hour traffic volumes exceeding those at the intersections modeled in the 2003 AQMP. Additionally, the adjacent roadways are not located in an area where vertical or horizontal atmospheric mixing is substantially limited, such as a tunnel or overpass. Furthermore, there are no factors unique to the local meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. Therefore, the operational CO impact would be less than significant.

Criterion 3: Toxic Air Contaminants

Toxic Air Pollutants—On-site Workers

A variety of State and national programs protect workers from safety hazards, including high air pollutant concentrations.^{79,80}

On-site workers are not required to be addressed through the HRA process. A document published by CAPCOA, Health Risk Assessments for Proposed Land Use Projects, indicates that on-site receptors are included in risk assessments if they are persons not employed by the project.⁸¹ Persons not employed by the proposed project would not remain on-site for any significant period. Therefore, an HRA for on-site workers is not required or recommended. No further discussion is necessary.

Health Risk Assessment

During construction and operation, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. The SCAQMD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction and operation. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM₁₀.

⁷⁸ Urban Crossroad. 2022. Iowa and Palmyrita Warehouses Vehicle Miles Traveled (VMT) Analysis. August.

⁷⁹ Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling/data/CH_250700.html. Accessed October 24, 2022.

⁸⁰ Centers for Disease Control and Prevention (CDC). 2012. Construction. Website: www.cdc.gov/niosh/construction/. Indoor Environmental Quality—website: www.cdc.gov/niosh/topics/indoorenv/constructionieq.html. Accessed October 24, 2022.

⁸¹ California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

The Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommend method for the estimation of cancer risk is shown in the equations.

$$\text{Cancer Risk} = C_{\text{DPM}} \times \text{Inhalation Exposure Factor} \quad (\text{EQ-1})$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu\text{g}/\text{m}^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = \text{CPF} \times \text{EF} \times \text{ED} \times \text{DBR} \times \text{AAF}/\text{AT} \quad (\text{EQ-2})$$

Where:

CPF = Inhalation cancer potency factor for the TAC: $1.1 \text{ (mg/kg-day)}^{-1}$ for DPM

EF = Exposure frequency (days/year)

ED = Exposure duration (years of construction)

AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)

AT = Averaging time period over which exposure is averaged (days)

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each

chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a Hazard Index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To quantify non-carcinogenic impacts, the HI approach was used.

$$HI = C_{\text{ann}}/\text{REL} \quad (\text{EQ-3})$$

Where:

HI = chronic hazard index

C_{ann} = annual average concentration of TAC as derived from the air dispersion model ($\mu\text{g}/\text{m}^3$)

REL = reference exposure level above which a significant impact is assumed to occur ($\mu\text{g}/\text{m}^3$)

The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. OEHHA has defined a REL for DPM of $5 \mu\text{g}/\text{m}^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

Toxic Air Contaminant Construction Analysis

The construction equipment would emit DPM, which the ARB has identified as a carcinogen. However, the DPM emissions during construction are short-term in nature. Determination of risk from DPM is considered over a 30-year or 70-year exposure time. Guidance published by CAPCOA, Health Risk Assessments for Proposed Land Use Projects, does not include guidance for health risks from construction projects addressed in CEQA; risks near construction projects are expected to be included later when the toxic emissions from construction activities are better understood. In addition, construction of the project is not anticipated to result in generations of TACs for multiple years or require substantial amounts of hauling or intense activity. Furthermore, there are no existing sensitive receptors sites (such as residential uses, hospitals, daycares, or schools) directly adjacent to the project site. In addition, a construction LST analysis was performed to assess localized impacts from the project. PM_{10} and $\text{PM}_{2.5}$ are commonly used as proxies for DPM. As shown in Table 14, emissions of $\text{PM}_{2.5}$ and PM_{10} would not result in a potentially significant localized impact. Therefore, exposure to DPM during construction is anticipated to result in a less than significant health impact.

Toxic Air Contaminant Operational Analysis

The proposed project would generate passenger vehicle trips from employees, visitors, and light-duty delivery vehicles traveling to and from the project site; however, the proposed project would also be served with daily truck deliveries. The main source of DPM from the long-term operations of warehouses is from combustion of diesel fuel in diesel-powered engines in heavy-duty trucks. Motor

vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel to and from the project site each day. An estimate of the number of vehicle trips that the proposed project would generate was prepared by traffic impact study, as shown in Table 9 contained in Section 4-Modeling Parameters and Assumptions.

Operational emissions for the proposed project were assessed assuming the first year of operations would occur in 2024. The emission factors, AERMOD Output, emission estimation spreadsheets, and HARP2 files used to estimate motor vehicle DPM emissions during project operations are provided in Appendix B.

The results HRA prepared for project operations, for cancer risk and long-term chronic cancer risk, are summarized below. Air dispersion modeling was utilized to assess the proposed project’s potential health risks using AERMOD. Exhaust emissions of DPM (as PM₁₀ exhaust) were estimated using EMFAC2021. The OEHHA-recommended values for the various cancer risk parameters used in the operational HRA are provided below in Table 16. The parameters and methodology are summarized in Section 4-Modeling Parameters and Assumptions. Detailed calculations are provided in Appendix B.

Table 16: Exposure Assumptions for Cancer Risk

Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors	Time at Home Factor (%)	Daily Breathing Rate ¹ (l/kg-day)
	Hours/day	Days/year				
Sensitive/Residential—Infant (Third Trimester)						
Third Trimester	24	350	0.25	10	1	361
0–2 years	24	350	2	10	1	1,090
Sensitive Receptor—Child						
>2–16 years	24	350	14	3	1	745
Sensitive Receptor—Adult						
> 16 to 30 years	24	350	14	1	73	335
> 30 years	24	350	0	1	73	290
Notes: ¹ The daily breathing rates for sensitive/residential receptors assume the 95th percentile breathing rates for all individuals. (l/kg-day) = liters per kilogram body weight per day Source: Appendix B.						

An operational HRA was performed to determine calculate the cancer health risks and the non-hazard indices for sensitive receptors within approximately 2,000 feet of the project boundary. The results of this analysis are summarized in Table 17.

Table 17: Summary of Health Risk Impacts from Project Operations (30-Year Exposure)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index ⁽¹⁾
Operations Only		
Risks and Hazards at the MIR over 30-year exposure	0.5	0.0001
SCAQMD Significance Threshold	10	1
Exceeds Individual Source Threshold?	No	No
Notes: MIR = Maximally Impacted Sensitive Receptor SCAQMD = South Coast Air Quality Management District ¹ Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM ₁₀ exhaust) by the REL of 5 µg/m ³ . Source: Appendix B.		

The maximum cancer risks at the MIR over a 30-year operational exposure duration would be less than 10 in one million, and the maximum hazard index for chronic HI would be less than 0.1. As noted in Table 17, the health risks and HI are below the SCAQMD’s thresholds of significance under all scenarios analyzed. Therefore, the proposed project’s operation would not expose sensitive receptors to substantial pollutant concentrations.

Cumulative Toxic Air Contaminant Operational Analysis

As previously discussed, projects that exceed project-specific significance thresholds are considered by the SCAQMD cumulatively considerable. Conversely, projects that do not exceed project-specific thresholds are generally not considered cumulatively significant. As discussed in Criteria 1 through 3, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Since the proposed project would not exceed project-specific thresholds it would not be considered to result in cumulatively significant impacts.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

5.2.4 - Objectionable Odors

Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Impact Analysis

Odor impacts on residential areas and other sensitive receptors, such as hospitals, daycare centers, schools, etc., warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor.

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District (Valley Air District) does have a screening distance for odor sources. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. Proposed projects that would site a new sensitive receptor farther than the applicable screening distances from an existing odor source would not likely have a significant impact. The SCAQMD considers residences, schools, daycare centers, playgrounds, and medical facilities as sensitive receptor land uses. The closest sensitive receptor located near the project site is a single-family home which is 850 feet north from the closest project boundary.

These screening distances by type of odor generator are listed in Table 18.

Table 18: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile

Odor Generator	Screening Distance
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). February 19.	

Construction-Related Odors

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, the intermittent nature of construction activities, and the highly diffusive properties of diesel PM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques and the odors would be typical of most construction sites and temporary in nature.

Operational-Related Odors

The proposed project includes the construction and development of a warehouse building, parking spaces, and associated landscaping. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feedlots, coffee roasters, asphalt batch plants, and rendering plants. The end uses of the proposed warehouse would involve distribution. The proposed project would not produce any offensive odor emitting end uses such as coffee roasting, composting, feed lots, refining, sewage treatment, or solid waste management and would not be considered an odor generator as identified in Table 18. Additionally, since the proposed project would not include new sensitive receptors, such as residences, the proposed project would not locate new sensitive receptors near an odor source. Therefore, the proposed project would not be a generator of objectionable odors during operations. Minor sources of odors, such as exhaust from mobile sources (including heavy-duty trucks), are not typically associated with numerous odor complaints but are known to have temporary and less concentrated odors. In summary, the project's long-term operational activities would not have any substantial odor sources that would expose nearby receptors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

SECTION 6: GREENHOUSE GAS IMPACT ANALYSIS

6.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine whether a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

6.1.1 - Thresholds of Significance for the Proposed Project

Section 15064.4(b) of the CEQA Guidelines 2018 amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- **Consideration No. 1:** The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration No. 2:** Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration No. 3:** The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project’s incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies address the project’s incremental contribution to climate change and its conclusion that the project’s incremental contribution is not cumulatively considerable.

SCAQMD GHG Thresholds

The project site is within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document—Interim CEQA GHG Significance Threshold (Interim GHG Thresholds) that could be applied by lead agencies. The working group has not provided additional guidance since the release of the interim guidance in 2008. In 2010, the SCAQMD Tier 3 threshold was expanded to include non-industrial projects, as explained in the minutes from the most recent working group meeting.⁸² The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MTCO₂e per year.
 - Based on land use type: residential: 3,500 MT CO₂e per year; commercial: 1,400 MT CO₂e per year; industrial: 10,000 MT CO₂e per year; or mixed use: 3,000 MT CO₂e per year.
- Tier 4 has the following options:
 - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3, 2020 target for service population (SP), which includes residents and employees: 4.8 MT CO₂e/SP/year for projects and 6.6 MT CO₂e/SP/year for plans.
 - Option 3, 2035 target: 3.0 MT CO₂e/SP/year for projects and 4.1 MT CO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD provided substantial evidence in support of its threshold approach. The SCAQMD discusses its draft thresholds in the following excerpt:⁸³

The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to

⁸² South Coast Air Quality Management District (SCAQMD). 2010. Greenhouse Gas CEQA Threshold Stakeholder Working Group Meeting #15. September 28.

⁸³ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document.

establish a performance standard or target GHG reduction objective that will ultimately contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor’s Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order’s objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.

. . . staff’s recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

In summary, the SCAQMD’s draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order’s objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 parts per million (ppm), thus stabilizing global climate. The threshold of 10,000 MT CO₂e per year established for industrial facilities is recommended in SCAQMD’s latest air quality significance thresholds.⁸⁴

The City of Riverside has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, this analysis utilizes the SCAQMD’s draft local agency threshold for industrial uses of 10,000 MT CO₂e per year. This threshold is appropriate for the proposed project because both Scenario 1 and Scenario 2 would be composed of warehouse and manufacturing uses at operation. The second CEQA Checklist question would be evaluated by assessing the project’s consistency with the ARB’s adopted 2017 Scoping Plan Update and the City’s adopted CAP.

6.2 - Impact Analysis

6.2.1 - Greenhouse Gas Inventory

Impact GHG-1:	The proposed project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment.
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⁸⁴ South Coast Air Quality Management District. 2019. South Coast AQMD Air Quality Significance Thresholds. April. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>. Accessed August 5, 2020.

Impact Analysis

Construction Emissions

The proposed project would generate GHG emissions during construction activities, resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod Version 2020.4.0. Table 19, below, shows the annual construction GHG emissions.

Table 19: Proposed Project Construction GHG Emissions

Construction Activity	Total GHG Emissions (MT CO ₂ e per year)
Scenario 1	
Demolition + Frontage Construction 2023	80
Grading 2023	141
Building Construction 2023	36
Building Construction 2024	664
Paving 2023	22
Architectural Coating 2024	8
Total Construction Emissions (Scenario 1)	951
Scenario 1 Emissions Amortized Over 30 Years¹	32
Scenario 2	
Demolition + Frontage Construction 2023	80
Grading 2023	141
Building Construction 2023	35
Building Construction 2024	659
Paving 2023	22
Architectural Coating 2024	8
Total Construction Emissions (Scenario 2)	945
Scenario 2 Emissions Amortized Over 30 Years¹	32
Notes: GHG = greenhouse gas MT CO ₂ e = metric tons carbon dioxide equivalent Totals may not appear to sum exactly due to rounding. 1 Construction GHG emissions are amortized over the 30-year lifetime of the project. Source: Appendix A.	

As shown above, the proposed project would generate approximately 951 MT CO₂e during construction of Scenario 1 and 945 MT CO₂e during construction of Scenario 2. Over 30 years the construction GHG emissions would be amortized to approximately 32 MT CO₂e per year for each

scenario. Since SCAQMD has not established a construction GHG threshold, total construction emissions were amortized over 30 years and included in the emissions inventory to account for the short-term, one-time GHG emissions from the construction phase of the proposed project.

Operational Emissions

Operational, or long-term, emissions are those emissions that occur over the life of the project. Project operations were modeled for the 2024 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below and are described in more detail in Section 4-Modeling Parameters and Assumptions. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site. Based on the Traffic Analysis, the proposed project would generate 296 passenger car trips and 160 truck trips per day for Scenario 1 and 468 passenger car trips and 138 truck trips per day for Scenario 2.
- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. Natural gas uses could include heating water, space heating, dryers, stoves, or other uses.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.
- **Stationary Sources:** Based on the information provided by the project applicant, the proposed project would include one stationary source in the form of a fire pump. The fire pump is presumably for fire protection purposes. To present a conservative estimate of emissions, the fire pump is assumed to be 250 horsepower and tested every month, which totals 50 hours per year.⁸⁵

Table 20 presents the estimated annual GHG emissions from the project’s operational activities. As shown in Table 20, the project would generate approximately 4,241 MT CO₂e per year in Scenario 1 after the inclusion of 32 MT CO₂e per year from project construction and 4,002 MT CO₂e per year in Scenario 2.

⁸⁵ National Fire Protection Association (NFPA). 2022. Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems. Website: <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=25>. Accessed October 17, 2022.

Table 20: Operational Greenhouse Gas Emissions (Unmitigated)

GHG Emissions Source	GHG Emissions (MT CO ₂ e per year)
Scenario 1	
Area	<1
Energy	175
Mobile	3,672
Stationary	5
Waste	126
Water	231
Amortized Construction (Scenario 1)	32
Total Annual Project Emissions (Scenario 1)	4,241
Applicable Threshold	10,000
Exceed Applicable Threshold?	No
Scenario 2	
Area	<1
Energy	333
Mobile	3,293
Stationary	5
Waste	125
Water	214
Amortized Construction (Scenario 2)	32
Total Annual Project Emissions (Scenario 2)	4,002
Applicable Threshold	10,000
Exceed Applicable Threshold?	No
Notes: MT CO ₂ e = metric tons carbon dioxide equivalent Source: Appendix A.	

As shown in Table 20, the proposed project's operational GHG emissions would not exceed the applicable threshold in either scenario. Thus, the proposed project's construction and operational GHG emissions would not result in a significant impact on the environment.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

6.2.2 - Greenhouse Gas Reduction Plans

Impact GHG-2: The proposed project could conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases.

Impact Analysis

This impact is addressed by assessing the proposed project’s consistency with the ARB’s adopted 2017 Scoping Plan Update and the City’s adopted CAP. This would be achieved with an assessment of the proposed project’s compliance with applicable Scoping Plan measures and CAP measures as addressed below.

Senate Bill 32 2017 Scoping Plan Update

The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. Table 21 provides an analysis of the project’s consistency with the 2017 Scoping Plan Update measures. As shown in Table 21, many of the measures are not applicable to the proposed project, while the proposed project is consistent with strategies that are applicable.

Table 21: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	Not applicable. This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	Not applicable. This measure applies to existing buildings. The proposed project will not utilize existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Not applicable. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	Not Applicable. This measure applies to vehicle manufactures and does not apply to individual development projects. Nonetheless, portions of the proposed project are industrial in nature and would support minor truck operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including trips that would be coming to and from the project site.
Sustainable Freight Action Plan The plan’s target is to improve freight system efficiency 25 percent by increasing the value of goods and services	Consistent with Mitigation. The proposed project is industrial in nature and would support truck and freight operations. It is expected that deliveries throughout the

2017 Scoping Plan Update Reduction Measure	Project Consistency
produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.	State would be made with an increasing number of ZEV delivery trucks, including trips that would be coming to and from the project site. As discussed previously, implementation of GHG-2 would support the use of all-electric on-site on-road and off-road service equipment and infrastructure for the support and operation of standard freight vehicles and zero and near-zero freight vehicles.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	Consistent. The proposed project would not include major sources of black carbon. This measure revolves around ARB’s SLCP Reduction Strategy that was released in April 2016 as a result of SB 650. SB 650 required the State to develop a strategy to reduce emissions of SLCPs. DPM reductions have come from strong efforts to reduce on-road vehicle emissions. Car and truck engines used to be the largest sources of anthropogenic black carbon emissions in California, but the State’s existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years. These policies are based on existing technologies.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	Not applicable. The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Not applicable. The proposed project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor’s Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California’s natural and working land.	Not Applicable. The project site is in a built-up urban area next to existing light industrial uses and a highway and would not be considered natural or working lands.
Source: California Air Resources Board (ARB). 2017. California’s 2017 Climate Change Scoping Plan. November.	

As discussed in Table 21, the proposed project would not conflict with any applicable 2017 Scoping Plan Update reduction measures with implementation of MM GHG-2.

Consistency with Riverside Climate Action Plan

The City of Riverside adopted the CAP in January 2016 for the development and implementation of policies and programs to reduce GHG emissions within the City.⁸⁶ Table 22 summarizes the City’s CAP measures for development projects and the proposed project’s consistency with each measure.

Table 22: Consistency with City of Riverside Climate Action Plan

City of Riverside CAP Measures	Project Consistency
E-1 Traffic and Street Lights: Replace traffic and street lights with high-efficiency bulbs.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers. The proposed project would install high-efficiency light bulbs in order to comply with Title 24 of the California Building Standards Code standards.
E-2 Shade Trees: Strategically plant trees at new residential developments to reduce the urban heat island effect.	Not Applicable. The proposed project would not include residential uses. Nevertheless, the proposed project would include landscaping consistent with City of Riverside requirements in both Scenario 1 and Scenario 2 that would reduce the urban heat island effect.
E-3 Local Utility Programs – Electricity: Financing and incentives for business and home owners to make energy efficient, renewable energy, and water conservation improvements.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
E-4 Renewable Energy Production on Public Property: Large scale renewable energy installation on publicly owned property and in public right-of-way.	Not Applicable. This objective is aimed at the Government Agencies, not private developers.
E-5 UC Riverside Carbon Neutral Program: Collaborate with UCR to achieve a carbon neutral campus.	Not Applicable. This objective is aimed at the coordination with UC Riverside and City of Riverside, not private developers.
E-6 Riverside Public Utilities Technology Grants: RPU grant programs to foster research, development and demonstration of innovative solutions to energy problems.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
T-1 Bicycle Infrastructure Improvements: Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Consistent. The proposed project would include sidewalks that would be accessible for bicycles near portions of the project boundary. All new off-site paved roadways and frontage improvements would include bicycle lanes and infrastructure consistent with City of Riverside Municipal Code standards.
T-2 Bicycle Parking: Provide additional options for bicycle parking.	Consistent. The proposed project would be required to comply with the City of Riverside Municipal Code standards for bicycle parking.

⁸⁶ City of Riverside. 2016. Economic Prosperity Action Plan and Climate Action Plan. January.

City of Riverside CAP Measures	Project Consistency
T-3 End of Trip Facilities: Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	Consistent. The proposed project would include sidewalks that would be accessible for bicycles near portions of the project boundary
T-4 Promotional Transportation Demand Management: Encourage Transportation Demand Management strategies	Consistent. The proposed project would include clean air parking stalls dedicated to carpools and vanpools in each scenario.
T-5 Traffic Signal Coordination: Incorporate technology to synchronize and coordinate traffic signals along local arterials.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
T-6 Density: Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	Consistent. The proposed project would employ approximately 236 employees during operation and would operate seven days per week. As such the proposed project would improve employment density.
T-7 Mixed-Use Development: Provide for a variety of development types and uses.	Consistent. The proposed project would include warehouse and office uses in Scenario 1 and warehouse and manufacturing uses in Scenario 2.
T-8 Pedestrian Only Areas: Encourage walking by providing pedestrian only community areas.	Consistent. The proposed project would include sidewalks along the property boundaries as well as internally adjacent to parking areas and buildings. In addition, the proposed project would include sidewalks near portions of the project boundary.
T-9 Limited Parking Requirements for New Development: Reduce requirements for vehicle parking in new development projects.	Consistent. The proposed project would provide parking stalls consistent with the minimum parking required to comply with applicable City Municipal Code standards.
T-10 Bus Rapid Transit Services: Implement bus rapid transit service in the subregion to provide alternative transportation options.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-11 Voluntary Transportation Demand Management: Encourage employers to create TDM programs for their employees.	Consistent. The proposed project would include electric vehicle parking stalls and clean air carpool and vanpool parking stalls to incentivize the use of electric vehicles. In addition, the proposed project would include sidewalks to allow for pedestrian access.
T-12 Accelerated Bike Plan Implementation: Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-13 Fixed Guideway Transit: By 2020, complete feasibility study and by 2025 Introduce a fixed-route transit service in the jurisdiction.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-14 Neighborhood Electric Vehicle Programs: Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	Consistent. The proposed project would include electric vehicle charging stalls that would support charging infrastructure.

City of Riverside CAP Measures	Project Consistency
T-15 Subsidized Transit: Increase access to transit by providing free or reduced passes.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-16 Bike Share Program: Create nodes offering bike sharing at key locations throughout the City.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-17 Car Share Program: Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-18 SB 743 as Alternative to LOS: Use SB 743 to incentivize development in the downtown and other areas served by transit.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government and transit agencies, not private developers.
T-19 Alternative Fuel and Vehicle Technology and Infrastructure: Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	Consistent. The proposed project would include electric vehicle charging stalls that would support electric vehicle charging infrastructure.
T-20 Eco-Corridor: Create a geographically defined area(s) featuring best practices in sustainable urban design and green building focused on supporting both clean-tech and green businesses.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
W-1 Water Conservation and Efficiency: Reduce per capita water use by 20 percent by 2020.	Consistent. The proposed project would be required to be consistent with applicable water efficiency requirements detailed in the Green Building Standards Code (Title 24, California Code of Regulations). As such, the proposed project would be equipped with low-flow plumbing fixtures that reduce water use.
SW-1 Yard Waste Collection: Provide green waste collection bins community-wide.	Consistent. The proposed project would comply with applicable solid waste requirements.
SW-2 Food Scrap and Paper Diversion: Divert food and paper waste from landfills by implementing commercial and residential collection program.	Consistent. The proposed project would comply with applicable solid waste requirements.
A-1 Local Food and Agriculture: Promote local food and agricultural programs.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
Measure A-2: Urban Forest: Augment City’s Urban and Community Forest Program to include an Urban Forest Management Plan.	Not Applicable. This objective is aimed at the City of Riverside Municipal Government, not private developers.
Source: City of Riverside Economic Prosperity Action Plan and Climate Action Plan. 2016.	

In summary, the proposed project is consistent with applicable strategies and would not conflict with the recommendations and reduction measures outlined in the 2017 Scoping Plan addressing the SB 32 targets after incorporation of MM GHG-2. Furthermore, the proposed project would be

consistent with the applicable measures listed in the City’s CAP. Considering this information, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce the emissions of GHGs. Therefore, the impact would be less than significant with implementation of mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Project-specific Mitigation Measures

MM GHG-2 Zero-Emission Service Equipment

Prior to issuance of construction permit the project applicant shall demonstrate to the City of Riverside that all on-site off-road and on-road service equipment would utilize zero-emission technology. Additionally, the project applicant shall provide documentation to the City of Riverside that all proposed buildings would be designed to include electric outlets to support the use of all-electric or zero-emission on-site service equipment.

Level of Significance After Mitigation

Less than significant impact.

SECTION 7: ENERGY IMPACT ANALYSIS

7.1 - CEQA Guidelines

CEQA Guidelines define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in the environment.” To determine whether a project would have a significant impact on energy, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the proposed project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

7.2 - Impact Analysis

7.2.1 - Project Energy Consumption

Impact ENER-1: **The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.**

Impact Analysis

A discussion of the proposed project’s anticipated energy usage is presented below. Energy use consumed by the proposed project was estimated and includes natural gas, electricity, and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix C.

RPU provides electricity service at the project and Southern California Gas Company (SoCalGas) provides natural gas service to the City and the project site.

Construction Impacts

The project construction schedule was assumed to begin in fourth quarter 2023 and conclude in third quarter 2024. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require demolition, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition, site clearing, and grading), and the actual

construction of the building. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Construction equipment is estimated to consume a total of 35,152 gallons of diesel fuel over the entire construction duration for both Scenario 1 and Scenario 2 (Appendix C).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix C. Under Scenario 1, the proposed project is estimated to generate 1,278,897 VMT and a combined 69,302 gallons of combined gasoline and diesel for vehicle travel during construction. Under Scenario 2, the proposed project is estimated to generate 1,265,437 VMT and a combined 68,695 gallons. Table 23 shows the energy consumption for both Scenario 1 and Scenario 2.

Other equipment could include construction lighting, field services (office trailers), and electrically-driven equipment such as pumps and other tools. Section 7.35.020 of the Riverside Municipal Code defines permissible hours of construction as between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays (Riverside Municipal Code, Chapter 7.35). As on-site construction activities would be restricted to these hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 5,529 kilowatt hours (kWh) during the construction phase (Appendix C).

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 23.

Table 23: Estimated Project Energy Consumption

Energy Consumption Activity	Scenario 1 Consumption	Scenario 2 Consumption
Construction Equipment Fuel	35,152 gallons of gasoline and diesel	35,152 gallons of gasoline and diesel
Construction Vehicle Fuel	69,302 gallons of gasoline and diesel	68,695 gallons of gasoline and diesel
Construction Office Electricity	5,529 kWh	5,529 kWh
Operational Electricity Consumption	812,617 kWh/year	1,157,996 kWh/year
Operational Natural Gas Consumption	556,610 kBTU/year	2,352,737 kBTU/year
Operational Fuel Consumption—Passenger Vehicles	51,380 gallons of gasoline and diesel/year	65,704 gallons of gasoline and diesel/year
Operational Fuel Consumption—Trucks	304,918 gallons of primarily diesel/year	259,759 gallons of primarily diesel/year
Total Fuel Consumption (Passenger Vehicles and Trucks Combined)	356,297 gallons of gasoline and diesel/year	325,463 gallons of gasoline and diesel/year
Notes: kBTU = kilo-British Thermal Unit kWh = kilowatt-hour VMT = Vehicle Miles Traveled Source: Appendix C.		

The proposed project’s building would be designed and constructed in accordance with the City’s latest adopted energy efficiency standards, which are based on the State’s Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary. Table 23 shows the energy consumption for both Scenario 1 and Scenario 2. Overall, based on CalEEMod energy consumption rate, Scenario 1 has slightly more mobile source energy use than that of Scenario 1, but consumes less natural gas and electricity than Scenario 2.

Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th 63, 164-168, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Decreasing Overall Per Capita Energy Consumption

In 2020, RPU obtained 42.2 percent of its electricity from renewable energy sources, while the remaining electricity was sourced from nuclear (4.8 percent), natural gas (5.0 percent), and large

hydroelectric (1.4 percent).⁸⁷ Therefore, the proposed project's utility provider has met the State's 2020 objective of 33 percent and is making progress toward the State's 2024 RPS target of 44 percent. Furthermore, RPU would also be required to meet the State's future objective of 60 percent electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California's Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner. Therefore, the proposed project would not conflict with local, regional, or Statewide efforts being made to decrease per capita energy consumption.

Decreasing Reliance on Fossil Fuels

The proposed project would be designed and constructed in accordance with the California Building Standards Code (CBC) energy efficiency standards. For example, the proposed project would install low-flow plumbing fixtures and high-efficiency light that are compliant with the CBC. CBC energy efficiency standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. Compliance with the CBC would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. As a result, the increase in energy conservation and efficiency would reduce the amount of potentially fossil fuel-sourced electricity consumption, and thereby reducing project reliance on fossil fuels.

Project-related vehicle trips would consume 356,297 gallons of fuel for Scenario 1 and 325,463 gallons for Scenario 2 due to vehicles traveling to and from the project site. This analysis evaluated operational fuel consumption based on the proposed project's operational assumptions. In addition, the proposed project tenant would comply with heavy-duty truck idling limitations as trucks would unload and load goods to avoid fuel waste. The owners and operators of trucks and freight operations would comply with the Sustainable Freight Action Plan and phase in zero-emission trucks. In addition, the proposed project would include EV charging parking stalls and carpool and vanpool parking stalls on the project site, which would reduce the need to use fossil fuel powered vehicles. Regional access to the project site is provided by I- 215 and SR-60 which are 0.5 and 1 mile southeast of the project site. As a result, the proposed project is located near regional and local roadways that would provide convenient access for future residents and would not result in excessively long vehicle miles traveled. Thus, the location of the proposed project would help minimize fossil fuel reliance with respect to transportation fuel consumption.

Increasing Reliance on Renewable Energy Sources

The proposed project would be considered to conflict with this criterion if it did not take steps to increase the reliance on renewable energy sources. The proposed project would be required to comply with the applicable EV charging infrastructure standards for the development type, such as pre-wiring to facilitate future installation of EV charging stations. As a result, the proposed project

⁸⁷ California Energy Commission. 2022. Power Content Label. Website: <https://www.energy.ca.gov/filebrowser/download/3850>. Accessed October 28, 2022.

would be incrementally increasing overall reliance on renewable energy sources by including on-site renewable energy generation technologies and incorporating EV charging infrastructure to facilitate the future use of EVs. Furthermore, the proposed project would include carpool and vanpool parking stalls and carpool EV charging stalls that would incentivize the use of vehicles that are powered by electricity.

Conclusion

Energy consumption resulting from construction and operation of the proposed project would not be considered wasteful, inefficient, or unnecessary; therefore, the project would result in a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

7.2.2 - Energy Plan Consistency

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Impact Analysis

In 2020, RPU obtained 42.2 percent of its electricity from renewable energy sources, while the remaining electricity was sourced from nuclear (4.8 percent), natural gas (5.0 percent), and large hydroelectric (1.4 percent).⁸⁸ The utility would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California’s Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner.

The Riverside General Plan and CAP include policies related to energy conservation (Section 2.4.3 and Section 3.3.5); the project’s consistency with these policies are discussed in GHG Impact 1.

While several of these policies are voluntary or cannot be implemented by an individual development project, compliance with Title 24 standards and other applicable regulations would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project’s building, mechanical systems, and indoor and outdoor lighting.

⁸⁸ California Energy Commission. 2022. Power Content Label. Website: <https://www.energy.ca.gov/filebrowser/download/3850>. Accessed October 28, 2022.

Considering the above analysis, the proposed project would not result in the wasteful, inefficiency, or unnecessary consumption of energy resources. This impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

**Appendix A:
CalEEMod Output and Additional Supporting Information**

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Appendix A: CalEEMod Output and Additional Supporting Information

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Riverside City Palmyrita Avenue Warehouse Project CalEEMod Notes

Note 1. Based on applicant-provided site plan. Scenario 1 and Scenario 2's land use are summarized as follow:

Scenario 1

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

Scenario 2

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

Note 2. Based on applicant's schedule, demolition and grading would overlap. Construction would start in November 2023 and complete in September 2024.

Note 3. Based on applicant, the grading export volume would be 24,000 cubic yard.

Note 4. According to information provided by the Project Applicant, approximately 99,165 square feet of existing buildings and 258,000 square feet of pavement would be demolished. As such, an estimated 14,261 tons of demolition debris would be removed from the project site during demolition.

Note 5. SCAQMD low-VOC coating of 50 g/L is applied for interior and exterior paint. Because the proposed project would be built with tilt-up wall concrete panels with pre-finished metal components, the CalEEMod default coating area were reduced to half to represent minimal coating needed.

Note 6. The number of vehicle trips are adjusted based on the latest traffic study.¹ The passenger vehicle trips are assigned to office land use, and truck trips are assigned to warehouse/manufacturing land use as shown in the traffic analysis. The truck trip length is set to be 50 miles according to SCAQMD guidance and as a conservative estimate. Please see trip adjustment in appendix for details.

¹ Urban Crossroads. 2022. Palmyrita Warehouse Project Trip Generation Assessment. October.

- Note 7. Fleet mix was adjusted based on the 2-axle, 3-axle, and 4-axle truck ratio provided in the traffic study. 2-axle trucks were matched with LHDT1 and LHDT2, 3-axle trucks were matched with MHDT, and 4-axle trucks were matched with HHDT in CalEEMod default. Please see fleet mix adjustment in appendix for details.
- Note 8. A 250-hp fire pump is included to support the operation of the proposed project, and 50 hours test time is assumed during a year.
- Note 9. SCAQMD *dust control measures* were applied the model, which are required. The model was adjusted to include watering of exposed areas three times per day and limiting construction vehicle speeds to 15 miles per hour on unpaved roads.

The model runs selected Southern California Edison as the Utility Provider. The project site would be serviced by Riverside Public Utilities (RPU). RPU has a higher CO₂ intensity, however, it would not change any significance impact discussion for the proposed project.

Riverside Palmyrita Avenue Frontage Construction
Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.84	1000sqft	0.04	1,840.00	0
City Park	0.47	Acre	0.47	20,342.76	0
Other Non-Asphalt Surfaces	2.12	1000sqft	0.05	2,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - No operation trips are associated with frontage improvement.

Consumer Products -

Area Coating -Appendix A

- Landscape Equipment -
- Energy Use -
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	5/7/2024	12/19/2023
tblConstructionPhase	PhaseEndDate	12/5/2023	11/28/2023
tblConstructionPhase	PhaseEndDate	4/30/2024	12/12/2023
tblConstructionPhase	PhaseStartDate	5/1/2024	12/13/2023
tblConstructionPhase	PhaseStartDate	12/2/2023	11/27/2023
tblConstructionPhase	PhaseStartDate	4/24/2024	12/6/2023
tblLandUse	LandUseSquareFeet	20,473.20	20,342.76
tblLandUse	LandUseSquareFeet	2,120.00	2,125.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

2.1 Overall Construction
Unmitigated Construction

ROG Appendix A	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Year	tons/yr										MT/yr					
2023	3.7800e-003	0.0274	0.0300	6.0000e-005	6.1700e-003	1.2600e-003	7.4300e-003	2.8000e-003	1.1800e-003	3.9800e-003	0.0000	4.8758	4.8758	1.1400e-003	2.0000e-005	4.9090
Maximum	3.7800e-003	0.0274	0.0300	6.0000e-005	6.1700e-003	1.2600e-003	7.4300e-003	2.8000e-003	1.1800e-003	3.9800e-003	0.0000	4.8758	4.8758	1.1400e-003	2.0000e-005	4.9090

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.7800e-003	0.0274	0.0300	6.0000e-005	2.9300e-003	1.2600e-003	4.1900e-003	1.2300e-003	1.1800e-003	2.4100e-003	0.0000	4.8758	4.8758	1.1400e-003	2.0000e-005	4.9090
Maximum	3.7800e-003	0.0274	0.0300	6.0000e-005	2.9300e-003	1.2600e-003	4.1900e-003	1.2300e-003	1.1800e-003	2.4100e-003	0.0000	4.8758	4.8758	1.1400e-003	2.0000e-005	4.9090

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.51	0.00	43.61	56.07	0.00	39.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
Appendix A				

		Highest	
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2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1142	0.1142	1.0000e-005	0.0000	0.1148
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8.1200e-003	0.0000	8.1200e-003	4.8000e-004	0.0000	0.0201
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.1034	1.1034	9.0000e-005	1.0000e-005	1.1091
Total	5.1000e-004	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	8.1200e-003	1.2177	1.2258	5.8000e-004	1.0000e-005	1.2441

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1142	0.1142	1.0000e-005	0.0000	0.1148
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8.1200e-003	0.0000	8.1200e-003	4.8000e-004	0.0000	0.0201
Water						0.0000	0.0000		0.0000	0.0000	0.0000	1.1034	1.1034	9.0000e-005	1.0000e-005	1.1091
Total	5.1000e-004	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	8.1200e-003	1.2177	1.2258	5.8000e-004	1.0000e-005	1.2441

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/27/2023	11/28/2023	5	2	
2	Paving	Paving	12/6/2023	12/12/2023	5	5	
3	Appendix A Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 238 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3100e-003	0.0000	5.3100e-003	2.5700e-003	0.0000	2.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	5.3100e-003	4.2000e-004	5.7300e-003	2.5700e-003	3.9000e-004	2.9600e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0896	0.0896	0.0000	0.0000	0.0903
Total	3.0000e-005	2.0000e-005	3.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0896	0.0896	0.0000	0.0000	0.0903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e-004	0.0102	5.5500e-003	1.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481
Total	9.3000e-004	0.0102	5.5500e-003	1.0000e-005	2.0700e-003	4.2000e-004	2.4900e-003	1.0000e-003	3.9000e-004	1.3900e-003	0.0000	1.2381	1.2381	4.0000e-004	0.0000	1.2481

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	3.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0896	0.0896	0.0000	0.0000	0.0903
Total	3.0000e-005	2.0000e-005	3.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0896	0.0896	0.0000	0.0000	0.0903

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.8200e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5040	0.5040	1.0000e-005	1.0000e-005	0.5080
Total	1.8000e-004	1.4000e-004	1.8200e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5040	0.5040	1.0000e-005	1.0000e-005	0.5080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5300e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669
Paving	5.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5800e-003	0.0138	0.0176	3.0000e-005		6.6000e-004	6.6000e-004		6.2000e-004	6.2000e-004	0.0000	2.3498	2.3498	6.8000e-004	0.0000	2.3669

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.8200e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5040	0.5040	1.0000e-005	1.0000e-005	0.5080
Total	1.8000e-004	1.4000e-004	1.8200e-003	1.0000e-005	6.7000e-004	0.0000	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5040	0.5040	1.0000e-005	1.0000e-005	0.5080

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	1.0400e-003	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0560	0.0560	0.0000	0.0000	0.0564
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0560	0.0560	0.0000	0.0000	0.0564

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	1.0400e-003	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0560	0.0560	0.0000	0.0000	0.0564
Total	2.0000e-005	2.0000e-005	2.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0560	0.0560	0.0000	0.0000	0.0564

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1142	0.1142	1.0000e-005	0.0000	0.1148
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1142	0.1142	1.0000e-005	0.0000	0.1148
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	644		0.1142	1.0000e-005	0.0000	0.1148
Total			0.1142	1.0000e-005	0.0000	0.1148

Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	644		0.1142	1.0000e-005	0.0000	0.1148
Total			0.1142	1.0000e-005	0.0000	0.1148

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Unmitigated	5.1000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	5.2000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	5.2000e-004	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		1.1034	9.0000e-005	1.0000e-005	1.1091
Unmitigated		1.1034	9.0000e-005	1.0000e-005	1.1091

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 0.559996		1.1034	9.0000e-005	1.0000e-005	1.1091
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			1.1034	9.0000e-005	1.0000e-005	1.1091

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 0.559996		1.1034	9.0000e-005	1.0000e-005	1.1091
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Total			1.1034	9.0000e-005	1.0000e-005	1.1091

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		8.1200e-003	4.8000e-004	0.0000	0.0201
Unmitigated		8.1200e-003	4.8000e-004	0.0000	0.0201

Appendix A

8.2 Waste by Land Use

Unmitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.04		8.1200e-003	4.8000e-004	0.0000	0.0201
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			8.1200e-003	4.8000e-004	0.0000	0.0201

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.04		8.1200e-003	4.8000e-004	0.0000	0.0201
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Total			8.1200e-003	4.8000e-004	0.0000	0.0201

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Appendix A Equipment Type	Number
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11.0 Vegetation

Riverside Palmyrita Avenue Frontage Construction
Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.84	1000sqft	0.04	1,840.00	0
City Park	0.47	Acre	0.47	20,342.76	0
Other Non-Asphalt Surfaces	2.12	1000sqft	0.05	2,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT -

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - No operation trips are associated with frontage improvement.

Consumer Products -

Area Coating - Appendix A

- Landscape Equipment -
- Energy Use -
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	5/7/2024	12/19/2023
tblConstructionPhase	PhaseEndDate	12/5/2023	11/28/2023
tblConstructionPhase	PhaseEndDate	4/30/2024	12/12/2023
tblConstructionPhase	PhaseStartDate	5/1/2024	12/13/2023
tblConstructionPhase	PhaseStartDate	12/2/2023	11/27/2023
tblConstructionPhase	PhaseStartDate	4/24/2024	12/6/2023
tblLandUse	LandUseSquareFeet	20,473.20	20,342.76
tblLandUse	LandUseSquareFeet	2,120.00	2,125.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

ROG Appendix A	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Year	lb/day										lb/day					
2023	0.9684	10.2019	7.8799	0.0151	5.4324	0.4207	5.8530	2.6005	0.3870	2.9875	0.0000	1,471.3158	1,471.3158	0.4436	5.3200e-003	1,483.1098
Maximum	0.9684	10.2019	7.8799	0.0151	5.4324	0.4207	5.8530	2.6005	0.3870	2.9875	0.0000	1,471.3158	1,471.3158	0.4436	5.3200e-003	1,483.1098

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9684	10.2019	7.8799	0.0151	2.1921	0.4207	2.6127	1.0337	0.3870	1.4207	0.0000	1,471.3158	1,471.3158	0.4436	5.3200e-003	1,483.1098
Maximum	0.9684	10.2019	7.8799	0.0151	2.1921	0.4207	2.6127	1.0337	0.3870	1.4207	0.0000	1,471.3158	1,471.3158	0.4436	5.3200e-003	1,483.1098

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	59.65	0.00	55.36	60.25	0.00	52.45	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/27/2023	11/28/2023	5	2	
2	Paving	Paving	12/6/2023	12/12/2023	5	5	
3	Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 238 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area
 Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0349	0.0230	0.3818	1.0500e-003	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		106.5445	106.5445	2.1700e-003	2.3600e-003	107.3036
Total	0.0349	0.0230	0.3818	1.0500e-003	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		106.5445	106.5445	2.1700e-003	2.3600e-003	107.3036

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	2.0717	0.4201	2.4918	1.0017	0.3865	1.3882	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0349	0.0230	0.3818	1.0500e-003	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		106.5445	106.5445	2.1700e-003	2.3600e-003	107.3036
Total	0.0349	0.0230	0.3818	1.0500e-003	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		106.5445	106.5445	2.1700e-003	2.3600e-003	107.3036

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0785	0.0518	0.8589	2.3700e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		239.7251	239.7251	4.8900e-003	5.3200e-003	241.4330
Total	0.0785	0.0518	0.8589	2.3700e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		239.7251	239.7251	4.8900e-003	5.3200e-003	241.4330

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0785	0.0518	0.8589	2.3700e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		239.7251	239.7251	4.8900e-003	5.3200e-003	241.4330
Total	0.0785	0.0518	0.8589	2.3700e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		239.7251	239.7251	4.8900e-003	5.3200e-003	241.4330

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7200e-003	5.7600e-003	0.0954	2.6000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		26.6361	26.6361	5.4000e-004	5.9000e-004	26.8259
Total	8.7200e-003	5.7600e-003	0.0954	2.6000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		26.6361	26.6361	5.4000e-004	5.9000e-004	26.8259

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7200e-003	5.7600e-003	0.0954	2.6000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		26.6361	26.6361	5.4000e-004	5.9000e-004	26.8259
Total	8.7200e-003	5.7600e-003	0.0954	2.6000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		26.6361	26.6361	5.4000e-004	5.9000e-004	26.8259

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Unmitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Appendix A

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Riverside Palmyrita Avenue Frontage Construction
Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.84	1000sqft	0.04	1,840.00	0
City Park	0.47	Acre	0.47	20,342.76	0
Other Non-Asphalt Surfaces	2.12	1000sqft	0.05	2,125.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase -
- Trips and VMT -
- Demolition -
- Grading -
- Architectural Coating -
- Vehicle Trips - No operation trips are associated with frontage improvement.
- Consumer Products -
- Area Coating -Appendix A

- Landscape Equipment -
- Energy Use -
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	5/7/2024	12/19/2023
tblConstructionPhase	PhaseEndDate	12/5/2023	11/28/2023
tblConstructionPhase	PhaseEndDate	4/30/2024	12/12/2023
tblConstructionPhase	PhaseStartDate	5/1/2024	12/13/2023
tblConstructionPhase	PhaseStartDate	12/2/2023	11/27/2023
tblConstructionPhase	PhaseStartDate	4/24/2024	12/6/2023
tblLandUse	LandUseSquareFeet	20,473.20	20,342.76
tblLandUse	LandUseSquareFeet	2,120.00	2,125.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

ROG Appendix A	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Year	lb/day										lb/day					
2023	0.9670	10.2028	7.7093	0.0150	5.4324	0.4207	5.8530	2.6005	0.3870	2.9875	0.0000	1,461.2743	1,461.2743	0.4435	5.4400e-003	1,473.0829
Maximum	0.9670	10.2028	7.7093	0.0150	5.4324	0.4207	5.8530	2.6005	0.3870	2.9875	0.0000	1,461.2743	1,461.2743	0.4435	5.4400e-003	1,473.0829

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9670	10.2028	7.7093	0.0150	2.1921	0.4207	2.6127	1.0337	0.3870	1.4207	0.0000	1,461.2743	1,461.2743	0.4435	5.4400e-003	1,473.0829
Maximum	0.9670	10.2028	7.7093	0.0150	2.1921	0.4207	2.6127	1.0337	0.3870	1.4207	0.0000	1,461.2743	1,461.2743	0.4435	5.4400e-003	1,473.0829

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	59.65	0.00	55.36	60.25	0.00	52.45	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/27/2023	11/28/2023	5	2	
2	Paving	Paving	12/6/2023	12/12/2023	5	5	
3	Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 238 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Appendix A

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0239	0.3059	9.5000e-004	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		96.5029	96.5029	2.1200e-003	2.4200e-003	97.2767
Total	0.0335	0.0239	0.3059	9.5000e-004	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		96.5029	96.5029	2.1200e-003	2.4200e-003	97.2767

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	2.0717	0.4201	2.4918	1.0017	0.3865	1.3882	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0335	0.0239	0.3059	9.5000e-004	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		96.5029	96.5029	2.1200e-003	2.4200e-003	97.2767
Total	0.0335	0.0239	0.3059	9.5000e-004	0.1204	5.5000e-004	0.1210	0.0319	5.1000e-004	0.0324		96.5029	96.5029	2.1200e-003	2.4200e-003	97.2767

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0753	0.0538	0.6883	2.1500e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		217.1316	217.1316	4.7600e-003	5.4400e-003	218.8727
Total	0.0753	0.0538	0.6883	2.1500e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		217.1316	217.1316	4.7600e-003	5.4400e-003	218.8727

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0753	0.0538	0.6883	2.1500e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		217.1316	217.1316	4.7600e-003	5.4400e-003	218.8727
Total	0.0753	0.0538	0.6883	2.1500e-003	0.2709	1.2400e-003	0.2722	0.0719	1.1400e-003	0.0730		217.1316	217.1316	4.7600e-003	5.4400e-003	218.8727

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3600e-003	5.9700e-003	0.0765	2.4000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		24.1257	24.1257	5.3000e-004	6.0000e-004	24.3192
Total	8.3600e-003	5.9700e-003	0.0765	2.4000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		24.1257	24.1257	5.3000e-004	6.0000e-004	24.3192

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3600e-003	5.9700e-003	0.0765	2.4000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		24.1257	24.1257	5.3000e-004	6.0000e-004	24.3192
Total	8.3600e-003	5.9700e-003	0.0765	2.4000e-004	0.0301	1.4000e-004	0.0302	7.9800e-003	1.3000e-004	8.1100e-003		24.1257	24.1257	5.3000e-004	6.0000e-004	24.3192

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Unmitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Appendix A

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S1

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Note 1
- Construction Phase - Note 2
- Demolition - Note 4
- Grading - Note 3
- Architectural Coating - Note 5
- Vehicle Trips - Note 6
- Consumer Products -
- Area Coating -Appendix A

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation -

Fleet Mix - Note 7

Stationary Sources - Emergency Generators and Fire Pumps - Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	398,639.00	199,320.00
tblArchitecturalCoating	ConstArea_Parking	15,002.00	66,440.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.04
tblFleetMix A	MCY	0.02	0.00

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tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblGrading	MaterialExported	0.00	24,000.00
tblLandUse	LandUseSquareFeet	249,960.00	249,958.00
tblLandUse	LotAcreage	0.36	0.18
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

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tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	18.70
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	18.70
tblVehicleTrips	SU_TR	1.74	0.64
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	18.70
tblVehicleTrips	WD_TR	1.74	0.64

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0753	0.8875	0.6910	2.6500e-003	0.3124	0.0307	0.3431	0.0778	0.0285	0.1063	0.0000	244.8683	244.8683	0.0321	0.0203	251.7294
2024	0.9523	1.7997	2.7547	7.5300e-003	0.4299	0.0682	0.4980	0.1157	0.0641	0.1798	0.0000	682.8268	682.8268	0.0659	0.0321	694.0332
Maximum	0.9523	1.7997	2.7547	7.5300e-003	0.4299	0.0682	0.4980	0.1157	0.0641	0.1798	0.0000	682.8268	682.8268	0.0659	0.0321	694.0332

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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0753	0.8875	0.6910	2.6500e-003	0.1617	0.0307	0.1923	0.0412	0.0285	0.0697	0.0000	244.8682	244.8682	0.0321	0.0203	251.7292
2024	0.9523	1.7996	2.7547	7.5300e-003	0.4299	0.0682	0.4980	0.1157	0.0641	0.1798	0.0000	682.8265	682.8265	0.0659	0.0321	694.0329
Maximum	0.9523	1.7996	2.7547	7.5300e-003	0.4299	0.0682	0.4980	0.1157	0.0641	0.1798	0.0000	682.8265	682.8265	0.0659	0.0321	694.0329

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.31	0.00	17.92	18.92	0.00	12.80	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-20-2023	2-19-2024	1.2666	1.2666
2	2-20-2024	5-19-2024	0.6514	0.6514
3	5-20-2024	8-19-2024	0.7524	0.7524
4	8-20-2024	9-30-2024	0.9064	0.9064
		Highest	1.2666	1.2666

2.2 Overall Operational

Unmitigated Operational

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1043	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003
Energy	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	173.8167	173.8167	0.0127	2.0200e-003	174.7367
Mobile	0.1756	5.5987	2.4264	0.0369	1.7805	0.0678	1.8483	0.4935	0.0648	0.5582	0.0000	3,531.9794	3,531.9794	0.0460	0.4676	3,672.4690
Stationary	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Waste						0.0000	0.0000		0.0000	0.0000	50.7112	0.0000	50.7112	2.9970	0.0000	125.6349
Water						0.0000	0.0000		0.0000	0.0000	19.2292	147.9105	167.1397	1.9875	0.0482	231.1754
Total	1.2931	5.6547	2.4789	0.0371	1.7805	0.0714	1.8519	0.4935	0.0684	0.5618	69.9404	3,858.4733	3,928.4137	5.0439	0.5178	4,208.7999

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Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1043	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003
Energy	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	173.8167	173.8167	0.0127	2.0200e-003	174.7367
Mobile	0.1756	5.5987	2.4264	0.0369	1.7805	0.0678	1.8483	0.4935	0.0648	0.5582	0.0000	3,531.9794	3,531.9794	0.0460	0.4676	3,672.4690
Stationary	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Waste						0.0000	0.0000		0.0000	0.0000	50.7112	0.0000	50.7112	2.9970	0.0000	125.6349
Water						0.0000	0.0000		0.0000	0.0000	19.2292	147.9105	167.1397	1.9875	0.0482	231.1754
Total	1.2931	5.6547	2.4789	0.0371	1.7805	0.0714	1.8519	0.4935	0.0684	0.5618	69.9404	3,858.4733	3,928.4137	5.0439	0.5178	4,208.7999

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition Appendix A	Demolition	11/20/2023	12/15/2023	5	20	

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2	Grading	Grading	11/20/2023	12/15/2023	5	20
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200
4	Paving	Paving	7/29/2024	8/23/2024	5	20
5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,320; Non-Residential Outdoor: 132,880; Striped Parking Area: 66,440 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

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Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	251.00	98.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1535	0.0000	0.1535	0.0233	0.0000	0.0233	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e-004	0.1535	9.9800e-003	0.1635	0.0233	9.2800e-003	0.0325	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0743	0.0195	3.9000e-004	0.0122	8.5000e-004	0.0130	3.3400e-003	8.1000e-004	4.1500e-003	0.0000	37.5541	37.5541	5.3000e-004	5.9200e-003	39.3308
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	6.0600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6798	1.6798	4.0000e-005	4.0000e-005	1.6933
Total	2.0800e-003	0.0747	0.0256	4.1000e-004	0.0144	8.6000e-004	0.0152	3.9300e-003	8.2000e-004	4.7500e-003	0.0000	39.2339	39.2339	5.7000e-004	5.9600e-003	41.0240

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0599	0.0000	0.0599	9.0700e-003	0.0000	9.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0599	9.9800e-003	0.0699	9.0700e-003	9.2800e-003	0.0184	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0743	0.0195	3.9000e-004	0.0122	8.5000e-004	0.0130	3.3400e-003	8.1000e-004	4.1500e-003	0.0000	37.5541	37.5541	5.3000e-004	5.9200e-003	39.3308
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	6.0600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6798	1.6798	4.0000e-005	4.0000e-005	1.6933
Total	2.0800e-003	0.0747	0.0256	4.1000e-004	0.0144	8.6000e-004	0.0152	3.9300e-003	8.2000e-004	4.7500e-003	0.0000	39.2339	39.2339	5.7000e-004	5.9600e-003	41.0240

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0936	0.0000	0.0936	0.0368	0.0000	0.0368	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3452	0.2805	6.2000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	54.5352	54.5352	0.0176	0.0000	54.9762
Total	0.0332	0.3452	0.2805	6.2000e-004	0.0936	0.0142	0.1078	0.0368	0.0131	0.0499	0.0000	54.5352	54.5352	0.0176	0.0000	54.9762

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1700e-003	0.1580	0.0416	8.2000e-004	0.0259	1.8100e-003	0.0277	7.1000e-003	1.7300e-003	8.8300e-003	0.0000	79.9023	79.9023	1.1300e-003	0.0126	83.6825
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	8.0900e-003	2.0000e-005	2.9600e-003	1.0000e-005	2.9700e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.2398	2.2398	5.0000e-005	6.0000e-005	2.2577
Total	3.9600e-003	0.1586	0.0496	8.4000e-004	0.0288	1.8200e-003	0.0307	7.8900e-003	1.7400e-003	9.6300e-003	0.0000	82.1420	82.1420	1.1800e-003	0.0127	85.9401

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0365	0.0000	0.0365	0.0143	0.0000	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3452	0.2805	6.2000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	54.5351	54.5351	0.0176	0.0000	54.9761
Total	0.0332	0.3452	0.2805	6.2000e-004	0.0365	0.0142	0.0507	0.0143	0.0131	0.0275	0.0000	54.5351	54.5351	0.0176	0.0000	54.9761

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1700e-003	0.1580	0.0416	8.2000e-004	0.0259	1.8100e-003	0.0277	7.1000e-003	1.7300e-003	8.8300e-003	0.0000	79.9023	79.9023	1.1300e-003	0.0126	83.6825
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	8.0900e-003	2.0000e-005	2.9600e-003	1.0000e-005	2.9700e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.2398	2.2398	5.0000e-005	6.0000e-005	2.2577
Total	3.9600e-003	0.1586	0.0496	8.4000e-004	0.0288	1.8200e-003	0.0307	7.8900e-003	1.7400e-003	9.6300e-003	0.0000	82.1420	82.1420	1.1800e-003	0.0127	85.9401

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0183	6.9000e-003	1.0000e-004	3.5400e-003	1.6000e-004	3.7000e-003	1.0200e-003	1.5000e-004	1.1700e-003	0.0000	9.3204	9.3204	9.0000e-005	1.3800e-003	9.7330
Worker	4.9300e-003	3.8500e-003	0.0507	1.5000e-004	0.0186	9.0000e-005	0.0187	4.9300e-003	8.0000e-005	5.0100e-003	0.0000	14.0545	14.0545	3.0000e-004	3.5000e-004	14.1669
Total	5.4900e-003	0.0222	0.0576	2.5000e-004	0.0221	2.5000e-004	0.0224	5.9500e-003	2.3000e-004	6.1800e-003	0.0000	23.3749	23.3749	3.9000e-004	1.7300e-003	23.8999

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0183	6.9000e-003	1.0000e-004	3.5400e-003	1.6000e-004	3.7000e-003	1.0200e-003	1.5000e-004	1.1700e-003	0.0000	9.3204	9.3204	9.0000e-005	1.3800e-003	9.7330
Worker	4.9300e-003	3.8500e-003	0.0507	1.5000e-004	0.0186	9.0000e-005	0.0187	4.9300e-003	8.0000e-005	5.0100e-003	0.0000	14.0545	14.0545	3.0000e-004	3.5000e-004	14.1669
Total	5.4900e-003	0.0222	0.0576	2.5000e-004	0.0221	2.5000e-004	0.0224	5.9500e-003	2.3000e-004	6.1800e-003	0.0000	23.3749	23.3749	3.9000e-004	1.7300e-003	23.8999

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2567	220.2567	0.0521	0.0000	221.5588
Total	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2567	220.2567	0.0521	0.0000	221.5588

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.3482	0.1295	1.8100e-003	0.0673	3.0100e-003	0.0703	0.0194	2.8800e-003	0.0223	0.0000	174.3597	174.3597	1.8200e-003	0.0257	182.0691
Worker	0.0876	0.0650	0.9004	2.8200e-003	0.3529	1.5700e-003	0.3545	0.0937	1.4400e-003	0.0952	0.0000	258.5819	258.5819	5.2300e-003	6.1900e-003	260.5574
Total	0.0980	0.4133	1.0299	4.6300e-003	0.4202	4.5800e-003	0.4248	0.1131	4.3200e-003	0.1174	0.0000	432.9416	432.9416	7.0500e-003	0.0319	442.6265

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2564	220.2564	0.0521	0.0000	221.5585
Total	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2564	220.2564	0.0521	0.0000	221.5585

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.3482	0.1295	1.8100e-003	0.0673	3.0100e-003	0.0703	0.0194	2.8800e-003	0.0223	0.0000	174.3597	174.3597	1.8200e-003	0.0257	182.0691
Worker	0.0876	0.0650	0.9004	2.8200e-003	0.3529	1.5700e-003	0.3545	0.0937	1.4400e-003	0.0952	0.0000	258.5819	258.5819	5.2300e-003	6.1900e-003	260.5574
Total	0.0980	0.4133	1.0299	4.6300e-003	0.4202	4.5800e-003	0.4248	0.1131	4.3200e-003	0.1174	0.0000	432.9416	432.9416	7.0500e-003	0.0319	442.6265

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	7.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0174	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391
Total	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	7.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0174	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391
Total	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6929					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.6947	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636
Total	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6929					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.6947	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636
Total	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1756	5.5987	2.4264	0.0369	1.7805	0.0678	1.8483	0.4935	0.0648	0.5582	0.0000	3,531.9794	3,531.9794	0.0460	0.4676	3,672.4690
Unmitigated	0.1756	5.5987	2.4264	0.0369	1.7805	0.0678	1.8483	0.4935	0.0648	0.5582	0.0000	3,531.9794	3,531.9794	0.0460	0.4676	3,672.4690

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	1,339,396	1,339,396
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	2,911,534	2,911,534
Total	455.43	455.43	455.43	4,250,930	4,250,930

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park Appendix A	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6

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General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.1139	144.1139	0.0122	1.4700e-003	144.8574
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.1139	144.1139	0.0122	1.4700e-003	144.8574
NaturalGas Mitigated	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.7028	29.7028	5.7000e-004	5.4000e-004	29.8793
NaturalGas Unmitigated	3.0000e-003	0.0273	0.0229	1.6000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.7028	29.7028	5.7000e-004	5.4000e-004	29.8793

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	54194	2.9000e-004	2.6600e-003	2.2300e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8920	2.8920	6.0000e-005	5.0000e-005	2.9092
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	502416	2.7100e-003	0.0246	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003	0.0000	26.8108	26.8108	5.1000e-004	4.9000e-004	26.9701
Total		3.0000e-003	0.0273	0.0229	1.7000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.7028	29.7028	5.7000e-004	5.4000e-004	29.8793

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	54194	2.9000e-004	2.6600e-003	2.2300e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.8920	2.8920	6.0000e-005	5.0000e-005	2.9092
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	502416	2.7100e-003	0.0246	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003	0.0000	26.8108	26.8108	5.1000e-004	4.9000e-004	26.9701
Total		3.0000e-003	0.0273	0.0229	1.7000e-004		2.0700e-003	2.0700e-003		2.0700e-003	2.0700e-003	0.0000	29.7028	29.7028	5.7000e-004	5.4000e-004	29.8793

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
General Office Building	145202		25.7509	2.1700e-003	2.6000e-004	25.8838
Parking Lot	87512		15.5199	1.3100e-003	1.6000e-004	15.5999
Unrefrigerated Warehouse-No Rail	579903		102.8431	8.6800e-003	1.0500e-003	103.3737
Total			144.1139	0.0122	1.4700e-003	144.8574

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
General Office Building	145202		25.7509	2.1700e-003	2.6000e-004	25.8838
Parking Lot	87512		15.5199	1.3100e-003	1.6000e-004	15.5999
Unrefrigerated Warehouse-No Rail	579903		102.8431	8.6800e-003	1.0500e-003	103.3737
Total			144.1139	0.0122	1.4700e-003	144.8574

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1043 Appendix A	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	1.1043	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9773					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003
Total	1.1043	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1267					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9773					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e-004	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003
Total	1.1043	3.0000e-005	3.4800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.7900e-003	6.7900e-003	2.0000e-005	0.0000	7.2300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		167.1397	1.9875	0.0482	231.1754
Unmitigated		167.1397	1.9875	0.0482	231.1754

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 2.31147		4.5543	3.8000e-004	5.0000e-005	4.5778
General Office Building	2.80819 / 1.72115		10.7668	0.0923	2.2600e-003	13.7493
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	57.8032 / 0		151.8185	1.8948	0.0458	212.8484
Total			167.1397	1.9875	0.0482	231.1755

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 2.31147		4.5543	3.8000e-004	5.0000e-005	4.5778
General Office Building	2.80819 / 1.72115		10.7668	0.0923	2.2600e-003	13.7493
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	57.8032 / 0		151.8185	1.8948	0.0458	212.8484
Total			167.1397	1.9875	0.0482	231.1755

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		50.7112	2.9970	0.0000	125.6349

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated		50.7112	2.9970	0.0000	125.6349
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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.17		0.0345	2.0400e-003	0.0000	0.0855
General Office Building	14.69		2.9819	0.1762	0.0000	7.3876
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	234.96		47.6948	2.8187	0.0000	118.1617
Total			50.7112	2.9970	0.0000	125.6349

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.17		0.0345	2.0400e-003	0.0000	0.0855
General Office Building	14.69		2.9819	0.1762	0.0000	7.3876
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	234.96		47.6948	2.8187	0.0000	118.1617
Total			50.7112	2.9970	0.0000	125.6349

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**User Defined Equipment**

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Fire Pump - Diesel (175 - 300 HP)	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Total	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767

11.0 Vegetation

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Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Note 1
- Construction Phase - Note 2
- Demolition - Note 4
- Grading - Note 3
- Architectural Coating - Note 5
- Vehicle Trips - Note 6
- Consumer Products -
- Area Coating -Appendix A

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation -

Fleet Mix - Note 7

Stationary Sources - Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	398,639.00	199,320.00
tblArchitecturalCoating	ConstArea_Parking	15,002.00	66,440.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.04
tblFleetMix A	MCY	0.02	0.00

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblGrading	MaterialExported	0.00	24,000.00
tblLandUse	LandUseSquareFeet	249,960.00	249,958.00
tblLandUse	LotAcreage	0.36	0.18
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	18.70
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	18.70
tblVehicleTrips	SU_TR	1.74	0.64
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	18.70
tblVehicleTrips	WD_TR	1.74	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.2259	78.1208	55.4198	0.2267	29.0942	2.6902	31.7844	7.1990	2.4950	9.6940	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584
2024	72.2786	27.1391	43.9894	0.1028	5.2490	1.1309	5.9746	1.4082	1.0543	2.3228	0.0000	10,214.3542	10,214.3542	1.4049	0.3805	10,360.0003
Maximum	72.2786	78.1208	55.4198	0.2267	29.0942	2.6902	31.7844	7.1990	2.4950	9.6940	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.2259	78.1208	55.4198	0.2267	14.0222	2.6902	16.7124	3.5382	2.4950	6.0332	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584
2024	72.2786	27.1391	43.9894	0.1028	5.2490	1.1309	5.9746	1.4082	1.0543	2.3228	0.0000	10,214.3542	10,214.3542	1.4049	0.3805	10,360.0003
Maximum	72.2786	78.1208	55.4198	0.2267	14.0222	2.6902	16.7124	3.5382	2.4950	6.0332	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.89	0.00	39.92	42.53	0.00	30.46	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Mobile	1.0626	29.1076	14.4059	0.2045	9.9312	0.3728	10.3040	2.7477	0.3562	3.1039		21,586.9776	21,586.9776	0.2784	2.8306	22,437.4574
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	7.1880	29.4179	14.7058	0.2057	9.9312	0.3927	10.3240	2.7477	0.3761	3.1239		21,795.8272	21,795.8272	0.2861	2.8339	22,647.4800

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
Mobile	1.0626	29.1076	14.4059	0.2045	9.9312	0.3728	10.3040	2.7477	0.3562	3.1039		21,586.9776	21,586.9776	0.2784	2.8306	22,437.4574
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	7.1880	29.4179	14.7058	0.2057	9.9312	0.3927	10.3240	2.7477	0.3761	3.1239		21,795.8272	21,795.8272	0.2861	2.8339	22,647.4800

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving Appendix A	Paving	7/29/2024	8/23/2024	5	20	

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,320; Non-Residential Outdoor: 132,880; Striped Parking Area: 66,440 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	251.00	98.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1543	7.0404	1.9360	0.0387	1.2339	0.0850	1.3189	0.3383	0.0813	0.4196		4,136.9096	4,136.9096	0.0587	0.6519	4,332.6338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0654	0.0432	0.7158	1.9800e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		199.7709	199.7709	4.0800e-003	4.4300e-003	201.1942
Total	0.2197	7.0836	2.6518	0.0407	1.4597	0.0860	1.5457	0.3982	0.0823	0.4804		4,336.6805	4,336.6805	0.0628	0.6563	4,533.8279

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1543	7.0404	1.9360	0.0387	1.2339	0.0850	1.3189	0.3383	0.0813	0.4196		4,136.9096	4,136.9096	0.0587	0.6519	4,332.6338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0654	0.0432	0.7158	1.9800e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		199.7709	199.7709	4.0800e-003	4.4300e-003	201.1942
Total	0.2197	7.0836	2.6518	0.0407	1.4597	0.0860	1.5457	0.3982	0.0823	0.4804		4,336.6805	4,336.6805	0.0628	0.6563	4,533.8279

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3283	14.9796	4.1192	0.0824	2.6253	0.1808	2.8061	0.7197	0.1730	0.8927		8,801.9353	8,801.9353	0.1249	1.3870	9,218.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0872	0.0576	0.9544	2.6400e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		266.3613	266.3613	5.4400e-003	5.9100e-003	268.2589
Total	0.4154	15.0372	5.0735	0.0851	2.9263	0.1822	3.1085	0.7996	0.1742	0.9738		9,068.2965	9,068.2965	0.1303	1.3929	9,486.6286

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3283	14.9796	4.1192	0.0824	2.6253	0.1808	2.8061	0.7197	0.1730	0.8927		8,801.9353	8,801.9353	0.1249	1.3870	9,218.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0872	0.0576	0.9544	2.6400e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		266.3613	266.3613	5.4400e-003	5.9100e-003	268.2589
Total	0.4154	15.0372	5.0735	0.0851	2.9263	0.1822	3.1085	0.7996	0.1742	0.9738		9,068.2965	9,068.2965	0.1303	1.3929	9,486.6286

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1156	3.4891	1.3598	0.0194	0.7183	0.0318	0.7501	0.2068	0.0304	0.2372		2,052.8945	2,052.8945	0.0205	0.3031	2,143.7258
Worker	1.0939	0.7227	11.9773	0.0331	3.7781	0.0173	3.7954	1.0019	0.0159	1.0178		3,342.8338	3,342.8338	0.0682	0.0742	3,366.6489
Total	1.2096	4.2118	13.3370	0.0524	4.4964	0.0491	4.5455	1.2086	0.0463	1.2550		5,395.7283	5,395.7283	0.0888	0.3773	5,510.3747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1156	3.4891	1.3598	0.0194	0.7183	0.0318	0.7501	0.2068	0.0304	0.2372		2,052.8945	2,052.8945	0.0205	0.3031	2,143.7258
Worker	1.0939	0.7227	11.9773	0.0331	3.7781	0.0173	3.7954	1.0019	0.0159	1.0178		3,342.8338	3,342.8338	0.0682	0.0742	3,366.6489
Total	1.2096	4.2118	13.3370	0.0524	4.4964	0.0491	4.5455	1.2086	0.0463	1.2550		5,395.7283	5,395.7283	0.0888	0.3773	5,510.3747

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1137	3.4900	1.3435	0.0191	0.7183	0.0316	0.7499	0.2068	0.0302	0.2370		2,021.2644	2,021.2644	0.0213	0.2980	2,110.5867
Worker	1.0206	0.6423	11.1849	0.0320	3.7781	0.0165	3.7946	1.0019	0.0152	1.0170		3,236.4315	3,236.4315	0.0617	0.0688	3,258.4797
Total	1.1343	4.1323	12.5284	0.0511	4.4964	0.0481	4.5445	1.2086	0.0454	1.2540		5,257.6959	5,257.6959	0.0829	0.3668	5,369.0664

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1137	3.4900	1.3435	0.0191	0.7183	0.0316	0.7499	0.2068	0.0302	0.2370		2,021.2644	2,021.2644	0.0213	0.2980	2,110.5867
Worker	1.0206	0.6423	11.1849	0.0320	3.7781	0.0165	3.7946	1.0019	0.0152	1.0170		3,236.4315	3,236.4315	0.0617	0.0688	3,258.4797
Total	1.1343	4.1323	12.5284	0.0511	4.4964	0.0481	4.5445	1.2086	0.0454	1.2540		5,257.6959	5,257.6959	0.0829	0.3668	5,369.0664

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299
Total	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299
Total	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996
Total	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996
Total	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0626	29.1076	14.4059	0.2045	9.9312	0.3728	10.3040	2.7477	0.3562	3.1039		21,586.9776	21,586.9776	0.2784	2.8306	22,437.4574

Unmitigated	1.0626	29.1076	14.4059	0.2045	9.9312	0.3728	10.3040	2.7477	0.3562	3.1039		21,586.9776	21,586.9776	0.2784	2.8306	22,437.4574
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	1,339,396	1,339,396
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	2,911,534	2,911,534
Total	455.43	455.43	455.43	4,250,930	4,250,930

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix Appendix A

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
NaturalGas Unmitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	148.477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1376.48	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.148477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.37648	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0515 Appendix A	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Unmitigated	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S1

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Demolition - Note 4

Grading - Note 3

Architectural Coating - Note 5

Vehicle Trips - Note 6

Consumer Products -

Area Coating -Appendix A

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation –

Fleet Mix - Note 7

Stationary Sources - Emergency Generators and Fire Pumps – Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	398,639.00	199,320.00
tblArchitecturalCoating	ConstArea_Parking	15,002.00	66,440.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix	LHD2	7.1910e-003	0.04
tblFleetMix A	MCY	0.02	0.00

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblGrading	MaterialExported	0.00	24,000.00
tblLandUse	LandUseSquareFeet	249,960.00	249,958.00
tblLandUse	LotAcreage	0.36	0.18
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	18.70
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	18.70
tblVehicleTrips	SU_TR	1.74	0.64
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	18.70
tblVehicleTrips	WD_TR	1.74	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1807	79.4366	55.2156	0.2265	29.0942	2.6906	31.7848	7.1990	2.4954	9.6944	0.0000	23,139.7420	23,139.7420	3.1845	2.0526	23,831.0330
2024	72.2249	27.3734	41.6797	0.0996	5.2490	1.1310	5.9747	1.4082	1.0543	2.3228	0.0000	9,896.1637	9,896.1637	1.4030	0.3833	10,042.5200
Maximum	72.2249	79.4366	55.2156	0.2265	29.0942	2.6906	31.7848	7.1990	2.4954	9.6944	0.0000	23,139.7420	23,139.7420	3.1845	2.0526	23,831.0330

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1807	79.4366	55.2156	0.2265	14.0222	2.6906	16.7128	3.5382	2.4954	6.0336	0.0000	23,139.7419	23,139.7419	3.1845	2.0526	23,831.0330
2024	72.2249	27.3734	41.6797	0.0996	5.2490	1.1310	5.9747	1.4082	1.0543	2.3228	0.0000	9,896.1637	9,896.1637	1.4030	0.3833	10,042.5200
Maximum	72.2249	79.4366	55.2156	0.2265	14.0222	2.6906	16.7128	3.5382	2.4954	6.0336	0.0000	23,139.7419	23,139.7419	3.1845	2.0526	23,831.0330

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.89	0.00	39.92	42.53	0.00	30.46	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mobile	0.9461	30.6862	13.0541	0.2024	9.9312	0.3730	10.3042	2.7477	0.3564	3.1041		21,373.0267	21,373.0267	0.2785	2.8351	22,224.8587
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	7.0715	30.9965	13.3540	0.2036	9.9312	0.3929	10.3241	2.7477	0.3763	3.1240		21,581.8764	21,581.8764	0.2862	2.8384	22,434.8813

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
Mobile	0.9461	30.6862	13.0541	0.2024	9.9312	0.3730	10.3042	2.7477	0.3564	3.1041		21,373.0267	21,373.0267	0.2785	2.8351	22,224.8587
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	7.0715	30.9965	13.3540	0.2036	9.9312	0.3929	10.3241	2.7477	0.3763	3.1240		21,581.8764	21,581.8764	0.2862	2.8384	22,434.8813

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving Appendix A	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,320; Non-Residential Outdoor: 132,880; Striped Parking Area: 66,440 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	251.00	98.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1418	7.4599	1.9768	0.0388	1.2339	0.0851	1.3190	0.3383	0.0814	0.4197		4,143.3793	4,143.3793	0.0581	0.6529	4,339.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0627	0.0448	0.5736	1.7900e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		180.9430	180.9430	3.9700e-003	4.5400e-003	182.3939
Total	0.2045	7.5047	2.5504	0.0406	1.4597	0.0861	1.5458	0.3982	0.0824	0.4805		4,324.3223	4,324.3223	0.0621	0.6574	4,521.7873

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1418	7.4599	1.9768	0.0388	1.2339	0.0851	1.3190	0.3383	0.0814	0.4197		4,143.3793	4,143.3793	0.0581	0.6529	4,339.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0627	0.0448	0.5736	1.7900e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		180.9430	180.9430	3.9700e-003	4.5400e-003	182.3939
Total	0.2045	7.5047	2.5504	0.0406	1.4597	0.0861	1.5458	0.3982	0.0824	0.4805		4,324.3223	4,324.3223	0.0621	0.6574	4,521.7873

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3017	15.8722	4.2059	0.0826	2.6253	0.1811	2.8063	0.7197	0.1732	0.8930		8,815.7006	8,815.7006	0.1236	1.3891	9,232.7520
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0836	0.0597	0.7648	2.3900e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		241.2573	241.2573	5.2900e-003	6.0500e-003	243.1919
Total	0.3853	15.9319	4.9707	0.0849	2.9263	0.1824	3.1087	0.7996	0.1745	0.9741		9,056.9579	9,056.9579	0.1289	1.3952	9,475.9438

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3017	15.8722	4.2059	0.0826	2.6253	0.1811	2.8063	0.7197	0.1732	0.8930		8,815.7006	8,815.7006	0.1236	1.3891	9,232.7520
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0836	0.0597	0.7648	2.3900e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		241.2573	241.2573	5.2900e-003	6.0500e-003	243.1919
Total	0.3853	15.9319	4.9707	0.0849	2.9263	0.1824	3.1087	0.7996	0.1745	0.9741		9,056.9579	9,056.9579	0.1289	1.3952	9,475.9438

3.4 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1076	3.6981	1.4037	0.0194	0.7183	0.0319	0.7502	0.2068	0.0305	0.2373		2,057.3998	2,057.3998	0.0202	0.3040	2,148.4950
Worker	1.0495	0.7497	9.5983	0.0300	3.7781	0.0173	3.7954	1.0019	0.0159	1.0178		3,027.7791	3,027.7791	0.0664	0.0759	3,052.0578
Total	1.1570	4.4478	11.0020	0.0494	4.4964	0.0492	4.5456	1.2086	0.0464	1.2551		5,085.1789	5,085.1789	0.0866	0.3799	5,200.5529

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1076	3.6981	1.4037	0.0194	0.7183	0.0319	0.7502	0.2068	0.0305	0.2373		2,057.3998	2,057.3998	0.0202	0.3040	2,148.4950
Worker	1.0495	0.7497	9.5983	0.0300	3.7781	0.0173	3.7954	1.0019	0.0159	1.0178		3,027.7791	3,027.7791	0.0664	0.0759	3,052.0578
Total	1.1570	4.4478	11.0020	0.0494	4.4964	0.0492	4.5456	1.2086	0.0464	1.2551		5,085.1789	5,085.1789	0.0866	0.3799	5,200.5529

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1057	3.6992	1.3874	0.0191	0.7183	0.0317	0.7500	0.2068	0.0303	0.2371		2,025.7313	2,025.7313	0.0209	0.2989	2,115.3109
Worker	0.9825	0.6661	8.9641	0.0290	3.7781	0.0165	3.7946	1.0019	0.0152	1.0170		2,931.9690	2,931.9690	0.0601	0.0704	2,954.4447
Total	1.0882	4.3653	10.3515	0.0481	4.4964	0.0482	4.5446	1.2086	0.0455	1.2541		4,957.7003	4,957.7003	0.0811	0.3692	5,069.7556

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1057	3.6992	1.3874	0.0191	0.7183	0.0317	0.7500	0.2068	0.0303	0.2371		2,025.7313	2,025.7313	0.0209	0.2989	2,115.3109
Worker	0.9825	0.6661	8.9641	0.0290	3.7781	0.0165	3.7946	1.0019	0.0152	1.0170		2,931.9690	2,931.9690	0.0601	0.0704	2,954.4447
Total	1.0882	4.3653	10.3515	0.0481	4.4964	0.0482	4.5446	1.2086	0.0455	1.2541		4,957.7003	4,957.7003	0.0811	0.3692	5,069.7556

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604
Total	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604
Total	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604

3.6 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348
Total	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348
Total	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9461	30.6862	13.0541	0.2024	9.9312	0.3730	10.3042	2.7477	0.3564	3.1041		21,373.0267	21,373.0267	0.2785	2.8351	22,224.8587

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.9461	30.6862	13.0541	0.2024	9.9312	0.3730	10.3042	2.7477	0.3564	3.1041		21,373.0267	21,373.0267	0.2785	2.8351	22,224.8587
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	1,339,396	1,339,396
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	2,911,534	2,911,534
Total	455.43	455.43	455.43	4,250,930	4,250,930

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix Appendix A

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
NaturalGas Unmitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	148.477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1376.48	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.148477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.37648	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0515 Appendix A	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S2

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Trips and VMT -

Demolition - Note 4

Grading - Note 3

Architectural Coating - Note 5

Vehicle Trips - Note 6 A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation - X

Fleet Mix - Note 7

Stationary Sources - Emergency Generators and Fire Pumps - Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	122,222.00	61,111.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	366,666.00	183,333.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00

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tb\FleetMix	LHD1	0.03	0.00
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD2	7.1910e-003	0.00
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MDV	0.14	0.15
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MHD	0.01	0.00
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\Grading Appendix A	MaterialExported	0.00	24,000.00

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tblLandUse	LandUseSquareFeet	61,110.00	61,111.00
tblLandUse	LandUseSquareFeet	177,330.00	177,332.00
tblLandUse	LandUseSquareFeet	104,544.00	104,694.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	77.00
tblVehicleTrips	ST_TR	6.42	0.46
tblVehicleTrips	ST_TR	1.74	0.61
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	77.00
tblVehicleTrips	SU_TR	5.09	0.46
tblVehicleTrips	SU_TR	1.74	0.61

Appendix A

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tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	77.00
tblVehicleTrips	WD_TR	3.93	0.46
tblVehicleTrips	WD_TR	1.74	0.61

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0752	0.8873	0.6904	2.6500e-003	0.3122	0.0307	0.3428	0.0777	0.0285	0.1062	0.0000	244.6052	244.6052	0.0321	0.0203	251.4607
2024	0.8584	1.7953	2.7426	7.4700e-003	0.4250	0.0681	0.4931	0.1144	0.0640	0.1784	0.0000	677.9570	677.9570	0.0658	0.0317	689.0611
Maximum	0.8584	1.7953	2.7426	7.4700e-003	0.4250	0.0681	0.4931	0.1144	0.0640	0.1784	0.0000	677.9570	677.9570	0.0658	0.0317	689.0611

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0752	0.8873	0.6904	2.6500e-003	0.1614	0.0307	0.1921	0.0411	0.0285	0.0696	0.0000	244.6051	244.6051	0.0321	0.0203	251.4606
2024	0.8584	1.7953	2.7426	7.4700e-003	0.4250	0.0681	0.4931	0.1144	0.0640	0.1784	0.0000	677.9567	677.9567	0.0658	0.0317	689.0609
Maximum	0.8584	1.7953	2.7426	7.4700e-003	0.4250	0.0681	0.4931	0.1144	0.0640	0.1784	0.0000	677.9567	677.9567	0.0658	0.0317	689.0609

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.45	0.00	18.03	19.06	0.00	12.86	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-20-2023	2-19-2024	1.2652	1.2652
2	2-20-2024	5-19-2024	0.6496	0.6496
3	5-20-2024	8-19-2024	0.7504	0.7504
4	8-20-2024	9-30-2024	0.8198	0.8198
		Highest	1.2652	1.2652

2.2 Overall Operational

Unmitigated Operational

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003
Energy	0.0127	0.1153	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	330.9165	330.9165	0.0197	4.4000e-003	332.7220
Mobile	0.1995	4.8150	2.6767	0.0332	1.7304	0.0587	1.7891	0.4771	0.0561	0.5332	0.0000	3,172.1885	3,172.1885	0.0445	0.4032	3,293.4559
Stationary	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Waste						0.0000	0.0000		0.0000	0.0000	50.3945	0.0000	50.3945	2.9782	0.0000	124.8503
Water						0.0000	0.0000		0.0000	0.0000	17.8315	136.7130	154.5445	1.8430	0.0446	213.9233
Total	1.2395	4.9590	2.8030	0.0339	1.7304	0.0690	1.7994	0.4771	0.0664	0.5434	68.2260	3,644.5842	3,712.8102	4.8861	0.4523	3,969.7348

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Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003
Energy	0.0127	0.1153	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	330.9165	330.9165	0.0197	4.4000e-003	332.7220
Mobile	0.1995	4.8150	2.6767	0.0332	1.7304	0.0587	1.7891	0.4771	0.0561	0.5332	0.0000	3,172.1885	3,172.1885	0.0445	0.4032	3,293.4559
Stationary	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Waste						0.0000	0.0000		0.0000	0.0000	50.3945	0.0000	50.3945	2.9782	0.0000	124.8503
Water						0.0000	0.0000		0.0000	0.0000	17.8315	136.7130	154.5445	1.8430	0.0446	213.9233
Total	1.2395	4.9590	2.8030	0.0339	1.7304	0.0690	1.7994	0.4771	0.0664	0.5434	68.2260	3,644.5842	3,712.8102	4.8861	0.4523	3,969.7348

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition Appendix A	Demolition	11/20/2023	12/15/2023	5	20	

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2	Grading	Grading	11/20/2023	12/15/2023	5	20
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200
4	Paving	Paving	7/29/2024	8/23/2024	5	20
5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,333; Non-Residential Outdoor: 61,111; Striped Parking Area: 14,610 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

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Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	248.00	97.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1535	0.0000	0.1535	0.0233	0.0000	0.0233	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e-004	0.1535	9.9800e-003	0.1635	0.0233	9.2800e-003	0.0325	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0743	0.0195	3.9000e-004	0.0122	8.5000e-004	0.0130	3.3400e-003	8.1000e-004	4.1500e-003	0.0000	37.5541	37.5541	5.3000e-004	5.9200e-003	39.3308
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	6.0600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6798	1.6798	4.0000e-005	4.0000e-005	1.6933
Total	2.0800e-003	0.0747	0.0256	4.1000e-004	0.0144	8.6000e-004	0.0152	3.9300e-003	8.2000e-004	4.7500e-003	0.0000	39.2339	39.2339	5.7000e-004	5.9600e-003	41.0240

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0599	0.0000	0.0599	9.0700e-003	0.0000	9.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0599	9.9800e-003	0.0699	9.0700e-003	9.2800e-003	0.0184	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0743	0.0195	3.9000e-004	0.0122	8.5000e-004	0.0130	3.3400e-003	8.1000e-004	4.1500e-003	0.0000	37.5541	37.5541	5.3000e-004	5.9200e-003	39.3308
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.6000e-004	6.0600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6798	1.6798	4.0000e-005	4.0000e-005	1.6933
Total	2.0800e-003	0.0747	0.0256	4.1000e-004	0.0144	8.6000e-004	0.0152	3.9300e-003	8.2000e-004	4.7500e-003	0.0000	39.2339	39.2339	5.7000e-004	5.9600e-003	41.0240

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0936	0.0000	0.0936	0.0368	0.0000	0.0368	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3452	0.2805	6.2000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	54.5352	54.5352	0.0176	0.0000	54.9762
Total	0.0332	0.3452	0.2805	6.2000e-004	0.0936	0.0142	0.1078	0.0368	0.0131	0.0499	0.0000	54.5352	54.5352	0.0176	0.0000	54.9762

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1700e-003	0.1580	0.0416	8.2000e-004	0.0259	1.8100e-003	0.0277	7.1000e-003	1.7300e-003	8.8300e-003	0.0000	79.9023	79.9023	1.1300e-003	0.0126	83.6825
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	8.0900e-003	2.0000e-005	2.9600e-003	1.0000e-005	2.9700e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.2398	2.2398	5.0000e-005	6.0000e-005	2.2577
Total	3.9600e-003	0.1586	0.0496	8.4000e-004	0.0288	1.8200e-003	0.0307	7.8900e-003	1.7400e-003	9.6300e-003	0.0000	82.1420	82.1420	1.1800e-003	0.0127	85.9401

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0365	0.0000	0.0365	0.0143	0.0000	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3452	0.2805	6.2000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	54.5351	54.5351	0.0176	0.0000	54.9761
Total	0.0332	0.3452	0.2805	6.2000e-004	0.0365	0.0142	0.0507	0.0143	0.0131	0.0275	0.0000	54.5351	54.5351	0.0176	0.0000	54.9761

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.1700e-003	0.1580	0.0416	8.2000e-004	0.0259	1.8100e-003	0.0277	7.1000e-003	1.7300e-003	8.8300e-003	0.0000	79.9023	79.9023	1.1300e-003	0.0126	83.6825
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	6.1000e-004	8.0900e-003	2.0000e-005	2.9600e-003	1.0000e-005	2.9700e-003	7.9000e-004	1.0000e-005	8.0000e-004	0.0000	2.2398	2.2398	5.0000e-005	6.0000e-005	2.2577
Total	3.9600e-003	0.1586	0.0496	8.4000e-004	0.0288	1.8200e-003	0.0307	7.8900e-003	1.7400e-003	9.6300e-003	0.0000	82.1420	82.1420	1.1800e-003	0.0127	85.9401

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5000e-004	0.0181	6.8300e-003	1.0000e-004	3.5100e-003	1.6000e-004	3.6600e-003	1.0100e-003	1.5000e-004	1.1600e-003	0.0000	9.2253	9.2253	9.0000e-005	1.3600e-003	9.6337
Worker	4.8700e-003	3.8100e-003	0.0501	1.5000e-004	0.0184	9.0000e-005	0.0184	4.8700e-003	8.0000e-005	4.9500e-003	0.0000	13.8865	13.8865	3.0000e-004	3.5000e-004	13.9975
Total	5.4200e-003	0.0220	0.0570	2.5000e-004	0.0219	2.5000e-004	0.0221	5.8800e-003	2.3000e-004	6.1100e-003	0.0000	23.1118	23.1118	3.9000e-004	1.7100e-003	23.6312

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5000e-004	0.0181	6.8300e-003	1.0000e-004	3.5100e-003	1.6000e-004	3.6600e-003	1.0100e-003	1.5000e-004	1.1600e-003	0.0000	9.2253	9.2253	9.0000e-005	1.3600e-003	9.6337
Worker	4.8700e-003	3.8100e-003	0.0501	1.5000e-004	0.0184	9.0000e-005	0.0184	4.8700e-003	8.0000e-005	4.9500e-003	0.0000	13.8865	13.8865	3.0000e-004	3.5000e-004	13.9975
Total	5.4200e-003	0.0220	0.0570	2.5000e-004	0.0219	2.5000e-004	0.0221	5.8800e-003	2.3000e-004	6.1100e-003	0.0000	23.1118	23.1118	3.9000e-004	1.7100e-003	23.6312

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.4 Building Construction - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2567	220.2567	0.0521	0.0000	221.5588
Total	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2567	220.2567	0.0521	0.0000	221.5588

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0103	0.3447	0.1282	1.7900e-003	0.0666	2.9800e-003	0.0696	0.0192	2.8500e-003	0.0221	0.0000	172.5805	172.5805	1.8000e-003	0.0255	180.2113
Worker	0.0866	0.0643	0.8896	2.7900e-003	0.3487	1.5500e-003	0.3503	0.0926	1.4200e-003	0.0940	0.0000	255.4913	255.4913	5.1700e-003	6.1200e-003	257.4432
Total	0.0969	0.4090	1.0178	4.5800e-003	0.4153	4.5300e-003	0.4199	0.1118	4.2700e-003	0.1161	0.0000	428.0718	428.0718	6.9700e-003	0.0316	437.6544

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2564	220.2564	0.0521	0.0000	221.5585
Total	0.1398	1.2772	1.5359	2.5600e-003		0.0583	0.0583		0.0548	0.0548	0.0000	220.2564	220.2564	0.0521	0.0000	221.5585

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0103	0.3447	0.1282	1.7900e-003	0.0666	2.9800e-003	0.0696	0.0192	2.8500e-003	0.0221	0.0000	172.5805	172.5805	1.8000e-003	0.0255	180.2113
Worker	0.0866	0.0643	0.8896	2.7900e-003	0.3487	1.5500e-003	0.3503	0.0926	1.4200e-003	0.0940	0.0000	255.4913	255.4913	5.1700e-003	6.1200e-003	257.4432
Total	0.0969	0.4090	1.0178	4.5800e-003	0.4153	4.5300e-003	0.4199	0.1118	4.2700e-003	0.1161	0.0000	428.0718	428.0718	6.9700e-003	0.0316	437.6544

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 Paving - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	7.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0172	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391
Total	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	7.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0172	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391
Total	5.5000e-004	4.1000e-004	5.6600e-003	2.0000e-005	2.2200e-003	1.0000e-005	2.2300e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.6266	1.6266	3.0000e-005	4.0000e-005	1.6391

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.6022	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636
Total	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636

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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.6022	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636
Total	1.8400e-003	1.3600e-003	0.0189	6.0000e-005	7.4000e-003	3.0000e-005	7.4300e-003	1.9600e-003	3.0000e-005	2.0000e-003	0.0000	5.4221	5.4221	1.1000e-004	1.3000e-004	5.4636

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1995	4.8150	2.6767	0.0332	1.7304	0.0587	1.7891	0.4771	0.0561	0.5332	0.0000	3,172.1885	3,172.1885	0.0445	0.4032	3,293.4559
Unmitigated	0.1995	4.8150	2.6767	0.0332	1.7304	0.0587	1.7891	0.4771	0.0561	0.5332	0.0000	3,172.1885	3,172.1885	0.0445	0.4032	3,293.4559

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	1,712,815	1,712,815
Manufacturing	28.11	28.11	28.11	511,613	511,613
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	1,968,718	1,968,718
Total	598.28	598.28	598.28	4,193,146	4,193,146

4.3 Trip Type Information

Land Use Appendix A	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

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City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Manufacturing	50.00	50.00	50.00	59.00	28.00	13.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	205.3655	205.3655	0.0173	2.1000e-003	206.4250
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	205.3655	205.3655	0.0173	2.1000e-003	206.4250
NaturalGas Mitigated	0.0127 Appendix A	0.1153	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5510	125.5510	2.4100e-003	2.3000e-003	126.2970

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NaturalGas Unmitigated	0.0127	0.1153	0.0969	6.9000e- 004		8.7700e- 003	8.7700e- 003		8.7700e- 003	8.7700e- 003	0.0000	125.5510	125.5510	2.4100e- 003	2.3000e- 003	126.2970
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	20580	1.1000e-004	1.0100e-003	8.5000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.0982	1.0982	2.0000e-005	2.0000e-005	1.1048
Manufacturing	1.97572e+006	0.0107	0.0969	0.0814	5.8000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003	0.0000	105.4319	105.4319	2.0200e-003	1.9300e-003	106.0584
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	356437	1.9200e-003	0.0175	0.0147	1.0000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0209	19.0209	3.6000e-004	3.5000e-004	19.1339
Total		0.0127	0.1153	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5510	125.5510	2.4000e-003	2.3000e-003	126.2970

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	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	20580	1.1000e-004	1.0100e-003	8.5000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.0982	1.0982	2.0000e-005	2.0000e-005	1.1048
Manufacturing	1.97572e+006	0.0107	0.0969	0.0814	5.8000e-004		7.3600e-003	7.3600e-003		7.3600e-003	7.3600e-003	0.0000	105.4319	105.4319	2.0200e-003	1.9300e-003	106.0584
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	356437	1.9200e-003	0.0175	0.0147	1.0000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0209	19.0209	3.6000e-004	3.5000e-004	19.1339
Total		0.0127	0.1153	0.0969	6.9000e-004		8.7700e-003	8.7700e-003		8.7700e-003	8.7700e-003	0.0000	125.5510	125.5510	2.4000e-003	2.3000e-003	126.2970

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
General Office Building	55140		9.7788	8.3000e-004	1.0000e-004	9.8293
Manufacturing	606221		107.5106	9.0700e-003	1.1000e-003	108.0652
Parking Lot	85225.1		15.1143	1.2800e-003	1.5000e-004	15.1923
Unrefrigerated Warehouse-No Rail	411410		72.9618	6.1600e-003	7.5000e-004	73.3382
Total			205.3655	0.0173	2.1000e-003	206.4250

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Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
City Park	0		0.0000	0.0000	0.0000	0.0000
General Office Building	55140		9.7788	8.3000e-004	1.0000e-004	9.8293
Manufacturing	606221		107.5106	9.0700e-003	1.1000e-003	108.0652
Parking Lot	85225.1		15.1143	1.2800e-003	1.5000e-004	15.1923
Unrefrigerated Warehouse-No Rail	411410		72.9618	6.1600e-003	7.5000e-004	73.3382
Total			205.3655	0.0173	2.1000e-003	206.4250

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Appendix A																

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003
Unmitigated	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003
Total	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003

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Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003
Total	1.0170	3.0000e-005	3.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.2600e-003	6.2600e-003	2.0000e-005	0.0000	6.6700e-003

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Mitigated		154.5445	1.8430	0.0446	213.9233
Unmitigated		154.5445	1.8430	0.0446	213.9233

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 2.85956		5.6342	4.8000e-004	6.0000e-005	5.6633
General Office Building	1.0664 / 0.653602		4.0887	0.0351	8.6000e-004	5.2212
Manufacturing	14.1317 / 0		37.1165	0.4632	0.0112	52.0370
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	41.0076 / 0		107.7051	1.3442	0.0325	151.0018
Total			154.5445	1.8430	0.0447	213.9233

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
City Park	0 / 2.85956		5.6342	4.8000e-004	6.0000e-005	5.6633
General Office Building	1.0664 / 0.653602		4.0887	0.0351	8.6000e-004	5.2212
Manufacturing	14.1317 / 0		37.1165	0.4632	0.0112	52.0370
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	41.0076 / 0		107.7051	1.3442	0.0325	151.0018
Total			154.5445	1.8430	0.0447	213.9233

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e	
	tons/yr	MT/yr			
Appendix A					

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated		50.3945	2.9782	0.0000	124.8503
Unmitigated		50.3945	2.9782	0.0000	124.8503

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.21		0.0426	2.5200e-003	0.0000	0.1056
General Office Building	5.58		1.1327	0.0669	0.0000	2.8062
Manufacturing	75.78		15.3827	0.9091	0.0000	38.1099
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	166.69		33.8366	1.9997	0.0000	83.8287
Total			50.3945	2.9782	0.0000	124.8503

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
City Park	0.21		0.0426	2.5200e-003	0.0000	0.1056
General Office Building	5.58		1.1327	0.0669	0.0000	2.8062
Manufacturing	75.78		15.3827	0.9091	0.0000	38.1099
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	166.69		33.8366	1.9997	0.0000	83.8287
Total			50.3945	2.9782	0.0000	124.8503

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Fire Pump - Diesel (175 - 300 HP)	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767
Total	0.0103	0.0287	0.0262	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.7600	4.7600	6.7000e-004	0.0000	4.7767

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S2

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Trips and VMT -

Demolition - Note 4

Grading - Note 3

Architectural Coating - Note 5

Vehicle Trips - Note 6 A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation -

Fleet Mix - Note 7

Stationary Sources - Emergency Generators and Fire Pumps - Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	122,222.00	61,111.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	366,666.00	183,333.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00

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tb\FleetMix	LHD1	0.03	0.00
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD2	7.1910e-003	0.00
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MDV	0.14	0.15
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MHD	0.01	0.00
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\Grading Appendix A	MaterialExported	0.00	24,000.00

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	61,110.00	61,111.00
tblLandUse	LandUseSquareFeet	177,330.00	177,332.00
tblLandUse	LandUseSquareFeet	104,544.00	104,694.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	77.00
tblVehicleTrips	ST_TR	6.42	0.46
tblVehicleTrips	ST_TR	1.74	0.61
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	77.00
tblVehicleTrips	SU_TR	5.09	0.46
tblVehicleTrips Appendix A	SU_TR	1.74	0.61

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	77.00
tblVehicleTrips	WD_TR	3.93	0.46
tblVehicleTrips	WD_TR	1.74	0.61

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.2259	78.1208	55.4198	0.2267	29.0942	2.6902	31.7844	7.1990	2.4950	9.6940	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584
2024	63.0124	27.0958	43.8420	0.1022	5.1965	1.1304	5.9216	1.3941	1.0538	2.3082	0.0000	10,155.0466	10,155.0466	1.4040	0.3766	10,299.5177
Maximum	63.0124	78.1208	55.4198	0.2267	29.0942	2.6902	31.7844	7.1990	2.4950	9.6940	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.2259	78.1208	55.4198	0.2267	14.0222	2.6902	16.7124	3.5382	2.4950	6.0332	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584
2024	63.0124	27.0958	43.8420	0.1022	5.1965	1.1304	5.9216	1.3941	1.0538	2.3082	0.0000	10,155.0466	10,155.0466	1.4040	0.3766	10,299.5177
Maximum	63.0124	78.1208	55.4198	0.2267	14.0222	2.6902	16.7124	3.5382	2.4950	6.0332	0.0000	23,163.4388	23,163.4388	3.1867	2.0492	23,853.7584

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.95	0.00	39.97	42.60	0.00	30.50	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Appendix A																

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mobile	1.2397	25.0330	16.0345	0.1847	9.6538	0.3230	9.9767	2.6571	0.3084	2.9655		19,454.0337	19,454.0337	0.2676	2.4399	20,187.8107
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.9401	25.8257	16.7375	0.1888	9.6538	0.3795	10.0333	2.6571	0.3650	3.0221		20,241.8075	20,241.8075	0.2864	2.4538	20,980.1975

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	1.2397	25.0330	16.0345	0.1847	9.6538	0.3230	9.9767	2.6571	0.3084	2.9655		19,454.0337	19,454.0337	0.2676	2.4399	20,187.8107
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.9401	25.8257	16.7375	0.1888	9.6538	0.3795	10.0333	2.6571	0.3650	3.0221		20,241.8075	20,241.8075	0.2864	2.4538	20,980.1975

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,333; Non-Residential Outdoor: 61,111; Striped Parking Area: 14,610 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	248.00	97.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1543	7.0404	1.9360	0.0387	1.2339	0.0850	1.3189	0.3383	0.0813	0.4196		4,136.9096	4,136.9096	0.0587	0.6519	4,332.6338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0654	0.0432	0.7158	1.9800e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		199.7709	199.7709	4.0800e-003	4.4300e-003	201.1942
Total	0.2197	7.0836	2.6518	0.0407	1.4597	0.0860	1.5457	0.3982	0.0823	0.4804		4,336.6805	4,336.6805	0.0628	0.6563	4,533.8279

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1543	7.0404	1.9360	0.0387	1.2339	0.0850	1.3189	0.3383	0.0813	0.4196		4,136.9096	4,136.9096	0.0587	0.6519	4,332.6338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0654	0.0432	0.7158	1.9800e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		199.7709	199.7709	4.0800e-003	4.4300e-003	201.1942
Total	0.2197	7.0836	2.6518	0.0407	1.4597	0.0860	1.5457	0.3982	0.0823	0.4804		4,336.6805	4,336.6805	0.0628	0.6563	4,533.8279

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3283	14.9796	4.1192	0.0824	2.6253	0.1808	2.8061	0.7197	0.1730	0.8927		8,801.9353	8,801.9353	0.1249	1.3870	9,218.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0872	0.0576	0.9544	2.6400e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		266.3613	266.3613	5.4400e-003	5.9100e-003	268.2589
Total	0.4154	15.0372	5.0735	0.0851	2.9263	0.1822	3.1085	0.7996	0.1742	0.9738		9,068.2965	9,068.2965	0.1303	1.3929	9,486.6286

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3283	14.9796	4.1192	0.0824	2.6253	0.1808	2.8061	0.7197	0.1730	0.8927		8,801.9353	8,801.9353	0.1249	1.3870	9,218.3697
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0872	0.0576	0.9544	2.6400e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		266.3613	266.3613	5.4400e-003	5.9100e-003	268.2589
Total	0.4154	15.0372	5.0735	0.0851	2.9263	0.1822	3.1085	0.7996	0.1742	0.9738		9,068.2965	9,068.2965	0.1303	1.3929	9,486.6286

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1145	3.4535	1.3459	0.0192	0.7110	0.0315	0.7425	0.2047	0.0301	0.2348		2,031.9466	2,031.9466	0.0203	0.3000	2,121.8510
Worker	1.0808	0.7140	11.8341	0.0327	3.7329	0.0171	3.7500	0.9899	0.0157	1.0056		3,302.8796	3,302.8796	0.0674	0.0733	3,326.4100
Total	1.1953	4.1675	13.1800	0.0518	4.4439	0.0486	4.4925	1.1946	0.0458	1.2404		5,334.8263	5,334.8263	0.0877	0.3733	5,448.2611

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1145	3.4535	1.3459	0.0192	0.7110	0.0315	0.7425	0.2047	0.0301	0.2348		2,031.9466	2,031.9466	0.0203	0.3000	2,121.8510
Worker	1.0808	0.7140	11.8341	0.0327	3.7329	0.0171	3.7500	0.9899	0.0157	1.0056		3,302.8796	3,302.8796	0.0674	0.0733	3,326.4100
Total	1.1953	4.1675	13.1800	0.0518	4.4439	0.0486	4.4925	1.1946	0.0458	1.2404		5,334.8263	5,334.8263	0.0877	0.3733	5,448.2611

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1126	3.4544	1.3298	0.0189	0.7109	0.0313	0.7422	0.2047	0.0299	0.2346		2,000.6392	2,000.6392	0.0211	0.2949	2,089.0501
Worker	1.0084	0.6347	11.0512	0.0316	3.7329	0.0163	3.7492	0.9899	0.0150	1.0049		3,197.7491	3,197.7491	0.0609	0.0680	3,219.5338
Total	1.1210	4.0890	12.3810	0.0505	4.4439	0.0476	4.4915	1.1945	0.0449	1.2395		5,198.3883	5,198.3883	0.0820	0.3629	5,308.5839

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1126	3.4544	1.3298	0.0189	0.7109	0.0313	0.7422	0.2047	0.0299	0.2346		2,000.6392	2,000.6392	0.0211	0.2949	2,089.0501
Worker	1.0084	0.6347	11.0512	0.0316	3.7329	0.0163	3.7492	0.9899	0.0150	1.0049		3,197.7491	3,197.7491	0.0609	0.0680	3,219.5338
Total	1.1210	4.0890	12.3810	0.0505	4.4439	0.0476	4.4915	1.1945	0.0449	1.2395		5,198.3883	5,198.3883	0.0820	0.3629	5,308.5839

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299
Total	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299
Total	0.0610	0.0384	0.6684	1.9100e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		193.4122	193.4122	3.6800e-003	4.1100e-003	194.7299

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996
Total	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996
Total	0.2033	0.1280	2.2281	6.3800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		644.7075	644.7075	0.0123	0.0137	649.0996

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2397	25.0330	16.0345	0.1847	9.6538	0.3230	9.9767	2.6571	0.3084	2.9655		19,454.0337	19,454.0337	0.2676	2.4399	20,187.8107

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	1.2397	25.0330	16.0345	0.1847	9.6538	0.3230	9.9767	2.6571	0.3084	2.9655		19,454.0337	19,454.0337	0.2676	2.4399	20,187.8107
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	1,712,815	1,712,815
Manufacturing	28.11	28.11	28.11	511,613	511,613
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	1,968,718	1,968,718
Total	598.28	598.28	598.28	4,193,146	4,193,146

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Manufacturing	50.00	50.00	50.00	59.00	28.00	13.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
NaturalGas Unmitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	56.3836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5412.93	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	976.541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0563836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5.41293	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.976541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Appendix A																

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Unmitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S2

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Note 1

Construction Phase - Note 2

Trips and VMT -

Demolition - Note 4

Grading - Note 3

Architectural Coating - Note 5

Vehicle Trips - Note 6 A

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Note 9

Area Mitigation - X

Fleet Mix - Note 7

Stationary Sources - Emergency Generators and Fire Pumps - Note 8

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	122,222.00	61,111.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	366,666.00	183,333.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tb\FleetMix	LHD1	0.03	0.00
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD2	7.1910e-003	0.00
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MDV	0.14	0.15
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MHD	0.01	0.00
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\Grading Appendix A	MaterialExported	0.00	24,000.00

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	61,110.00	61,111.00
tblLandUse	LandUseSquareFeet	177,330.00	177,332.00
tblLandUse	LandUseSquareFeet	104,544.00	104,694.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CC_TL	10.10	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CNW_TL	7.90	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	CW_TL	18.50	50.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	77.00
tblVehicleTrips	ST_TR	6.42	0.46
tblVehicleTrips	ST_TR	1.74	0.61
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	77.00
tblVehicleTrips	SU_TR	5.09	0.46
tblVehicleTrips Appendix A	SU_TR	1.74	0.61

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	77.00
tblVehicleTrips	WD_TR	3.93	0.46
tblVehicleTrips	WD_TR	1.74	0.61

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1807	79.4366	55.2156	0.2265	29.0942	2.6906	31.7848	7.1990	2.4954	9.6944	0.0000	23,139.7420	23,139.7420	3.1845	2.0526	23,831.0330
2024	62.9592	27.3277	41.5584	0.0991	5.1965	1.1305	5.9217	1.3941	1.0539	2.3083	0.0000	9,840.4495	9,840.4495	1.4020	0.3794	9,985.6231
Maximum	62.9592	79.4366	55.2156	0.2265	29.0942	2.6906	31.7848	7.1990	2.4954	9.6944	0.0000	23,139.7420	23,139.7420	3.1845	2.0526	23,831.0330

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	6.1807	79.4366	55.2156	0.2265	14.0222	2.6906	16.7128	3.5382	2.4954	6.0336	0.0000	23,139.7419	23,139.7419	3.1845	2.0526	23,831.0330
2024	62.9592	27.3277	41.5584	0.0991	5.1965	1.1305	5.9217	1.3941	1.0539	2.3083	0.0000	9,840.4495	9,840.4495	1.4020	0.3794	9,985.6231
Maximum	62.9592	79.4366	55.2156	0.2265	14.0222	2.6906	16.7128	3.5382	2.4954	6.0336	0.0000	23,139.7419	23,139.7419	3.1845	2.0526	23,831.0330

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.95	0.00	39.97	42.60	0.00	30.50	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mobile	1.0746	26.3864	14.3445	0.1820	9.6538	0.3231	9.9769	2.6571	0.3085	2.9657		19,176.6896	19,176.6896	0.2695	2.4444	19,911.8632
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.7749	27.1791	15.0475	0.1861	9.6538	0.3797	10.0335	2.6571	0.3651	3.0223		19,964.4633	19,964.4633	0.2882	2.4583	20,704.2500

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	1.0746	26.3864	14.3445	0.1820	9.6538	0.3231	9.9769	2.6571	0.3085	2.9657		19,176.6896	19,176.6896	0.2695	2.4444	19,911.8632
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.7749	27.1791	15.0475	0.1861	9.6538	0.3797	10.0335	2.6571	0.3651	3.0223		19,964.4633	19,964.4633	0.2882	2.4583	20,704.2500

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,333; Non-Residential Outdoor: 61,111; Striped Parking Area: 14,610 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	248.00	97.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1418	7.4599	1.9768	0.0388	1.2339	0.0851	1.3190	0.3383	0.0814	0.4197		4,143.3793	4,143.3793	0.0581	0.6529	4,339.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0627	0.0448	0.5736	1.7900e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		180.9430	180.9430	3.9700e-003	4.5400e-003	182.3939
Total	0.2045	7.5047	2.5504	0.0406	1.4597	0.0861	1.5458	0.3982	0.0824	0.4805		4,324.3223	4,324.3223	0.0621	0.6574	4,521.7873

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1418	7.4599	1.9768	0.0388	1.2339	0.0851	1.3190	0.3383	0.0814	0.4197		4,143.3793	4,143.3793	0.0581	0.6529	4,339.3934
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0627	0.0448	0.5736	1.7900e-003	0.2258	1.0300e-003	0.2268	0.0599	9.5000e-004	0.0608		180.9430	180.9430	3.9700e-003	4.5400e-003	182.3939
Total	0.2045	7.5047	2.5504	0.0406	1.4597	0.0861	1.5458	0.3982	0.0824	0.4805		4,324.3223	4,324.3223	0.0621	0.6574	4,521.7873

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3017	15.8722	4.2059	0.0826	2.6253	0.1811	2.8063	0.7197	0.1732	0.8930		8,815.7006	8,815.7006	0.1236	1.3891	9,232.7520
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0836	0.0597	0.7648	2.3900e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		241.2573	241.2573	5.2900e-003	6.0500e-003	243.1919
Total	0.3853	15.9319	4.9707	0.0849	2.9263	0.1824	3.1087	0.7996	0.1745	0.9741		9,056.9579	9,056.9579	0.1289	1.3952	9,475.9438

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3017	15.8722	4.2059	0.0826	2.6253	0.1811	2.8063	0.7197	0.1732	0.8930		8,815.7006	8,815.7006	0.1236	1.3891	9,232.7520
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0836	0.0597	0.7648	2.3900e-003	0.3010	1.3800e-003	0.3024	0.0798	1.2700e-003	0.0811		241.2573	241.2573	5.2900e-003	6.0500e-003	243.1919
Total	0.3853	15.9319	4.9707	0.0849	2.9263	0.1824	3.1087	0.7996	0.1745	0.9741		9,056.9579	9,056.9579	0.1289	1.3952	9,475.9438

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1065	3.6604	1.3894	0.0192	0.7110	0.0316	0.7426	0.2047	0.0302	0.2349		2,036.4059	2,036.4059	0.0200	0.3009	2,126.5716
Worker	1.0369	0.7407	9.4836	0.0296	3.7329	0.0171	3.7500	0.9899	0.0157	1.0056		2,991.5905	2,991.5905	0.0656	0.0750	3,015.5790
Total	1.1434	4.4011	10.8729	0.0488	4.4439	0.0487	4.4926	1.1946	0.0459	1.2405		5,027.9964	5,027.9964	0.0856	0.3759	5,142.1507

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1065	3.6604	1.3894	0.0192	0.7110	0.0316	0.7426	0.2047	0.0302	0.2349		2,036.4059	2,036.4059	0.0200	0.3009	2,126.5716
Worker	1.0369	0.7407	9.4836	0.0296	3.7329	0.0171	3.7500	0.9899	0.0157	1.0056		2,991.5905	2,991.5905	0.0656	0.0750	3,015.5790
Total	1.1434	4.4011	10.8729	0.0488	4.4439	0.0487	4.4926	1.1946	0.0459	1.2405		5,027.9964	5,027.9964	0.0856	0.3759	5,142.1507

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1046	3.6615	1.3732	0.0189	0.7109	0.0314	0.7423	0.2047	0.0300	0.2347		2,005.0606	2,005.0606	0.0207	0.2958	2,093.7261
Worker	0.9708	0.6581	8.8569	0.0287	3.7329	0.0163	3.7492	0.9899	0.0150	1.0049		2,896.9255	2,896.9255	0.0594	0.0695	2,919.1326
Total	1.0754	4.3196	10.2302	0.0476	4.4439	0.0477	4.4916	1.1945	0.0450	1.2395		4,901.9861	4,901.9861	0.0801	0.3653	5,012.8587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1046	3.6615	1.3732	0.0189	0.7109	0.0314	0.7423	0.2047	0.0300	0.2347		2,005.0606	2,005.0606	0.0207	0.2958	2,093.7261
Worker	0.9708	0.6581	8.8569	0.0287	3.7329	0.0163	3.7492	0.9899	0.0150	1.0049		2,896.9255	2,896.9255	0.0594	0.0695	2,919.1326
Total	1.0754	4.3196	10.2302	0.0476	4.4439	0.0477	4.4916	1.1945	0.0450	1.2395		4,901.9861	4,901.9861	0.0801	0.3653	5,012.8587

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604
Total	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604
Total	0.0587	0.0398	0.5357	1.7300e-003	0.2258	9.8000e-004	0.2268	0.0599	9.1000e-004	0.0608		175.2173	175.2173	3.5900e-003	4.2100e-003	176.5604

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348
Total	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348
Total	0.1957	0.1327	1.7857	5.7800e-003	0.7526	3.2800e-003	0.7559	0.1996	3.0200e-003	0.2026		584.0576	584.0576	0.0120	0.0140	588.5348

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0746	26.3864	14.3445	0.1820	9.6538	0.3231	9.9769	2.6571	0.3085	2.9657		19,176.6896	19,176.6896	0.2695	2.4444	19,911.8632

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	1.0746	26.3864	14.3445	0.1820	9.6538	0.3231	9.9769	2.6571	0.3085	2.9657		19,176.6896	19,176.6896	0.2695	2.4444	19,911.8632
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	1,712,815	1,712,815
Manufacturing	28.11	28.11	28.11	511,613	511,613
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	1,968,718	1,968,718
Total	598.28	598.28	598.28	4,193,146	4,193,146

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	18.50	10.10	7.90	33.00	48.00	19.00	77	19	4
Manufacturing	50.00	50.00	50.00	59.00	28.00	13.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	50.00	50.00	50.00	59.00	0.00	41.00	100	0	0

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
NaturalGas Unmitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	56.3836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5412.93	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	976.541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0563836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5.41293	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.976541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Appendix A																

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Unmitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Equipment Type	lb/day										lb/day						
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003			29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003			29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Frontage Construction LST

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.12	1000sqft	0.05	2,125.00	0
Parking Lot	1.84	1000sqft	0.04	1,845.00	0
City Park	0.47	Acre	0.47	20,343.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - The construction vehicle trips are reduced to 0.25 mile to represent localized emissions.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Operational trips are reduced to zero because no operational trips are associated with the frontage construction.

Consumer Products -

Area Coating -Appendix A

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD dust control measure.

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	2,120.00	2,125.00
tblLandUse	LandUseSquareFeet	1,840.00	1,845.00
tblLandUse	LandUseSquareFeet	20,473.20	20,343.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)**

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9467	10.1828	7.1118	0.0141	5.3135	0.4201	5.7337	2.5690	0.3865	2.9555	0.0000	1,367.6423	1,367.6423	0.4423	1.1100e-003	1,378.8466
Maximum	0.9467	10.1828	7.1118	0.0141	5.3135	0.4201	5.7337	2.5690	0.3865	2.9555	0.0000	1,367.6423	1,367.6423	0.4423	1.1100e-003	1,378.8466

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9467	10.1828	7.1118	0.0141	2.0733	0.4201	2.4934	1.0022	0.3865	1.3887	0.0000	1,367.6423	1,367.6423	0.4423	1.1100e-003	1,378.8466
Maximum	0.9467	10.1828	7.1118	0.0141	2.0733	0.4201	2.4934	1.0022	0.3865	1.3887	0.0000	1,367.6423	1,367.6423	0.4423	1.1100e-003	1,378.8466

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.98	0.00	56.51	60.99	0.00	53.01	0.00	0.00	0.00	0.00	0.00	0.00

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/27/2023	11/28/2023	5	2	
2	Paving	Paving	11/29/2023	12/5/2023	5	5	
3	Architectural Coating	Architectural Coating	12/6/2023	12/12/2023	5	5	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 1.5****Acres of Paving: 0.09****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 238 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating Appendix A	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	3.9200e-003	0.0404	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.8709	2.8709	8.8000e-004	4.9000e-004	3.0404
Total	0.0132	3.9200e-003	0.0404	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.8709	2.8709	8.8000e-004	4.9000e-004	3.0404

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	2.0717	0.4201	2.4918	1.0017	0.3865	1.3882	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	3.9200e-003	0.0404	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.8709	2.8709	8.8000e-004	4.9000e-004	3.0404
Total	0.0132	3.9200e-003	0.0404	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.8709	2.8709	8.8000e-004	4.9000e-004	3.0404

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	8.8300e-003	0.0909	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.4596	6.4596	1.9900e-003	1.1100e-003	6.8408
Total	0.0297	8.8300e-003	0.0909	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.4596	6.4596	1.9900e-003	1.1100e-003	6.8408

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	8.8300e-003	0.0909	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.4596	6.4596	1.9900e-003	1.1100e-003	6.8408
Total	0.0297	8.8300e-003	0.0909	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.4596	6.4596	1.9900e-003	1.1100e-003	6.8408

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-003	9.8000e-004	0.0101	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.7177	0.7177	2.2000e-004	1.2000e-004	0.7601
Total	3.3000e-003	9.8000e-004	0.0101	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.7177	0.7177	2.2000e-004	1.2000e-004	0.7601

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-003	9.8000e-004	0.0101	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.7177	0.7177	2.2000e-004	1.2000e-004	0.7601
Total	3.3000e-003	9.8000e-004	0.0101	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.7177	0.7177	2.2000e-004	1.2000e-004	0.7601

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Unmitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Frontage Construction LST

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.12	1000sqft	0.05	2,125.00	0
Parking Lot	1.84	1000sqft	0.04	1,845.00	0
City Park	0.47	Acre	0.47	20,343.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10	Operational Year	2024		
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - The construction vehicle trips are reduced to 0.25 mile to represent localized emissions.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - Operational trips are reduced to zero because no operational trips are associated with the frontage construction.

Consumer Products -

Area Coating -Appendix A

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - SCAQMD dust control measure.

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	2,120.00	2,125.00
tblLandUse	LandUseSquareFeet	1,840.00	1,845.00
tblLandUse	LandUseSquareFeet	20,473.20	20,343.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	HaulingTripLength	20.00	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	VendorTripLength	7.90	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblTripsAndVMT	WorkerTripLength	19.80	0.25
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	WD_TR	0.78	0.00

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)**

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9437	10.1829	7.1206	0.0141	5.3135	0.4201	5.7337	2.5690	0.3865	2.9555	0.0000	1,367.4763	1,367.4763	0.4424	1.1500e-003	1,378.6884
Maximum	0.9437	10.1829	7.1206	0.0141	5.3135	0.4201	5.7337	2.5690	0.3865	2.9555	0.0000	1,367.4763	1,367.4763	0.4424	1.1500e-003	1,378.6884

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.9437	10.1829	7.1206	0.0141	2.0733	0.4201	2.4934	1.0022	0.3865	1.3887	0.0000	1,367.4763	1,367.4763	0.4424	1.1500e-003	1,378.6884
Maximum	0.9437	10.1829	7.1206	0.0141	2.0733	0.4201	2.4934	1.0022	0.3865	1.3887	0.0000	1,367.4763	1,367.4763	0.4424	1.1500e-003	1,378.6884

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.98	0.00	56.51	60.99	0.00	53.01	0.00	0.00	0.00	0.00	0.00	0.00

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8200e-003	0.0000	4.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000	0.0000	1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/27/2023	11/28/2023	5	2	
2	Paving	Paving	11/29/2023	12/5/2023	5	5	
3	Architectural Coating	Architectural Coating	12/6/2023	12/12/2023	5	5	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 1.5****Acres of Paving: 0.09****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2; Non-Residential Outdoor: 1; Striped Parking Area: 238 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating Appendix A	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	3	8.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	0.25	0.25	0.25	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.7713	1,364.7713	0.4414		1,375.8062

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	4.0800e-003	0.0443	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.7049	2.7049	1.0200e-003	5.1000e-004	2.8822
Total	0.0102	4.0800e-003	0.0443	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.7049	2.7049	1.0200e-003	5.1000e-004	2.8822

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	0.9335	10.1789	5.5516	0.0141	2.0717	0.4201	2.4918	1.0017	0.3865	1.3882	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	4.0800e-003	0.0443	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.7049	2.7049	1.0200e-003	5.1000e-004	2.8822
Total	0.0102	4.0800e-003	0.0443	3.0000e-005	1.6000e-003	4.0000e-005	1.6400e-003	4.3000e-004	4.0000e-005	4.7000e-004		2.7049	2.7049	1.0200e-003	5.1000e-004	2.8822

3.3 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0229	9.1800e-003	0.0997	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.0861	6.0861	2.3000e-003	1.1500e-003	6.4849
Total	0.0229	9.1800e-003	0.0997	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.0861	6.0861	2.3000e-003	1.1500e-003	6.4849

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6321	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0229	9.1800e-003	0.0997	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.0861	6.0861	2.3000e-003	1.1500e-003	6.4849
Total	0.0229	9.1800e-003	0.0997	6.0000e-005	3.6000e-003	1.0000e-004	3.6900e-003	9.8000e-004	9.0000e-005	1.0700e-003		6.0861	6.0861	2.3000e-003	1.1500e-003	6.4849

3.4 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5400e-003	1.0200e-003	0.0111	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.6762	0.6762	2.6000e-004	1.3000e-004	0.7205
Total	2.5400e-003	1.0200e-003	0.0111	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.6762	0.6762	2.6000e-004	1.3000e-004	0.7205

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.2234					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	0.4151	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5400e-003	1.0200e-003	0.0111	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.6762	0.6762	2.6000e-004	1.3000e-004	0.7205
Total	2.5400e-003	1.0200e-003	0.0111	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.2000e-004		0.6762	0.6762	2.6000e-004	1.3000e-004	0.7205

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
Other Non-Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Other Non-Asphalt Surfaces	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Unmitigated	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.1000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003
Total	2.8200e-003	0.0000	4.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		9.7000e-004	9.7000e-004	0.0000		1.0300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Frontage Construction LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S1 LST

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase -
- Trips and VMT - The construction vehicle trips are reduced to 0.6 mile to represent localized emissions.
- Demolition -
- Grading -
- Architectural Coating -
- Vehicle Trips - The vehicle trips are reduced to 0.7 mile to represent localized emissions.

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	398,639.00	199,320.00
tblArchitecturalCoating	ConstArea_Parking	15,002.00	66,440.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix A	LHD2	7.1910e-003	0.04

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblGrading	MaterialExported	0.00	24,000.00
tblLandUse	LandUseSquareFeet	249,960.00	249,958.00
tblLandUse	LotAcreage	0.36	0.18
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT Appendix A	HaulingTripLength	20.00	0.60

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	18.70
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	18.70

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	SU_TR	1.74	0.64
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	18.70
tblVehicleTrips	WD_TR	1.74	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9494	60.9545	51.9961	0.1114	24.8449	2.4326	27.2775	6.0391	2.2487	8.2877	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233
2024	71.4902	24.4862	33.3201	0.0542	0.1971	1.0865	1.2674	0.0542	1.0124	1.0622	0.0000	5,231.4325	5,231.4325	1.3519	0.0672	5,284.6075
Maximum	71.4902	60.9545	51.9961	0.1114	24.8449	2.4326	27.2775	6.0391	2.2487	8.2877	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9494	60.9545	51.9961	0.1114	9.7728	2.4326	12.2055	2.3783	2.2487	4.6269	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233
2024	71.4902	24.4862	33.3201	0.0542	0.1971	1.0865	1.2674	0.0542	1.0124	1.0622	0.0000	5,231.4325	5,231.4325	1.3519	0.0672	5,284.6075
Maximum	71.4902	60.9545	51.9961	0.1114	9.7728	2.4326	12.2055	2.3783	2.2487	4.6269	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.19	0.00	52.80	60.08	0.00	39.15	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mobile	0.5846	2.6410	3.6571	7.0400e-003	0.2570	7.4100e-003	0.2644	0.0698	7.0300e-003	0.0768		738.6303	738.6303	0.0413	0.1055	771.0906
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.7100	2.9513	3.9570	8.2200e-003	0.2570	0.0273	0.2844	0.0698	0.0269	0.0967		947.4799	947.4799	0.0490	0.1088	981.1132

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
Mobile	0.5846	2.6410	3.6571	7.0400e-003	0.2570	7.4100e-003	0.2644	0.0698	7.0300e-003	0.0768		738.6303	738.6303	0.0413	0.1055	771.0906
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.7100	2.9513	3.9570	8.2200e-003	0.2570	0.0273	0.2844	0.0698	0.0269	0.0967		947.4799	947.4799	0.0490	0.1088	981.1132

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving Appendix A	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,320; Non-Residential Outdoor: 132,880; Striped Parking Area: 66,440 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Building Construction	9	251.00	98.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0957	1.5781	1.3103	3.2700e-003	0.0385	3.3200e-003	0.0418	0.0107	3.1800e-003	0.0139		347.6523	347.6523	6.4500e-003	0.0547	364.1232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	8.0000e-003	0.0872	9.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.8631	8.8631	1.7000e-003	9.9000e-004	9.2006
Total	0.1211	1.5861	1.3975	3.3600e-003	0.0455	3.4200e-003	0.0489	0.0126	3.2700e-003	0.0158		356.5155	356.5155	8.1500e-003	0.0557	373.3238

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0957	1.5781	1.3103	3.2700e-003	0.0385	3.3200e-003	0.0418	0.0107	3.1800e-003	0.0139		347.6523	347.6523	6.4500e-003	0.0547	364.1232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	8.0000e-003	0.0872	9.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.8631	8.8631	1.7000e-003	9.9000e-004	9.2006
Total	0.1211	1.5861	1.3975	3.3600e-003	0.0455	3.4200e-003	0.0489	0.0126	3.2700e-003	0.0158		356.5155	356.5155	8.1500e-003	0.0557	373.3238

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2035	3.3577	2.7878	6.9500e-003	0.0819	7.0700e-003	0.0889	0.0227	6.7600e-003	0.0295		739.6858	739.6858	0.0137	0.1165	774.7302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0107	0.1163	1.2000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		11.8175	11.8175	2.2700e-003	1.3200e-003	12.2674
Total	0.2375	3.3684	2.9041	7.0700e-003	0.0912	7.2000e-003	0.0984	0.0252	6.8800e-003	0.0321		751.5033	751.5033	0.0160	0.1178	786.9977

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2035	3.3577	2.7878	6.9500e-003	0.0819	7.0700e-003	0.0889	0.0227	6.7600e-003	0.0295		739.6858	739.6858	0.0137	0.1165	774.7302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0107	0.1163	1.2000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		11.8175	11.8175	2.2700e-003	1.3200e-003	12.2674
Total	0.2375	3.3684	2.9041	7.0700e-003	0.0912	7.2000e-003	0.0984	0.0252	6.8800e-003	0.0321		751.5033	751.5033	0.0160	0.1178	786.9977

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0778	1.3913	1.0573	3.0300e-003	0.0569	3.0700e-003	0.0600	0.0166	2.9300e-003	0.0196		321.0519	321.0519	5.8100e-003	0.0492	335.8528
Worker	0.4259	0.1338	1.4591	1.4700e-003	0.1169	1.6500e-003	0.1185	0.0313	1.5200e-003	0.0328		148.3094	148.3094	0.0284	0.0166	153.9563
Total	0.5037	1.5251	2.5164	4.5000e-003	0.1738	4.7200e-003	0.1786	0.0480	4.4500e-003	0.0524		469.3612	469.3612	0.0343	0.0657	489.8091

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0778	1.3913	1.0573	3.0300e-003	0.0569	3.0700e-003	0.0600	0.0166	2.9300e-003	0.0196		321.0519	321.0519	5.8100e-003	0.0492	335.8528
Worker	0.4259	0.1338	1.4591	1.4700e-003	0.1169	1.6500e-003	0.1185	0.0313	1.5200e-003	0.0328		148.3094	148.3094	0.0284	0.0166	153.9563
Total	0.5037	1.5251	2.5164	4.5000e-003	0.1738	4.7200e-003	0.1786	0.0480	4.4500e-003	0.0524		469.3612	469.3612	0.0343	0.0657	489.8091

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0771	1.3875	1.0494	2.9800e-003	0.0569	3.0400e-003	0.0600	0.0166	2.9100e-003	0.0196		316.0451	316.0451	5.8500e-003	0.0484	330.6096
Worker	0.3937	0.1231	1.3948	1.4200e-003	0.1169	1.5700e-003	0.1185	0.0313	1.4500e-003	0.0328		143.5619	143.5619	0.0262	0.0157	148.8957
Total	0.4708	1.5105	2.4442	4.4000e-003	0.1738	4.6100e-003	0.1784	0.0480	4.3600e-003	0.0523		459.6070	459.6070	0.0320	0.0641	479.5053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0771	1.3875	1.0494	2.9800e-003	0.0569	3.0400e-003	0.0600	0.0166	2.9100e-003	0.0196		316.0451	316.0451	5.8500e-003	0.0484	330.6096
Worker	0.3937	0.1231	1.3948	1.4200e-003	0.1169	1.5700e-003	0.1185	0.0313	1.4500e-003	0.0328		143.5619	143.5619	0.0262	0.0157	148.8957
Total	0.4708	1.5105	2.4442	4.4000e-003	0.1738	4.6100e-003	0.1784	0.0480	4.3600e-003	0.0523		459.6070	459.6070	0.0320	0.0641	479.5053

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982
Total	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982
Total	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605
Total	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605
Total	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5846	2.6410	3.6571	7.0400e-003	0.2570	7.4100e-003	0.2644	0.0698	7.0300e-003	0.0768		738.6303	738.6303	0.0413	0.1055	771.0906

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.5846	2.6410	3.6571	7.0400e-003	0.2570	7.4100e-003	0.2644	0.0698	7.0300e-003	0.0768		738.6303	738.6303	0.0413	0.1055	771.0906
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	75,283	75,283
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	40,761	40,761
Total	455.43	455.43	455.43	116,045	116,045

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	0.70	0.70	0.70	33.00	48.00	19.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.70	0.70	0.70	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix Appendix A

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
NaturalGas Unmitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	148.477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1376.48	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.148477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.37648	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0515 Appendix A	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S1 LST

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	15.80	1000sqft	0.18	15,800.00	0
Unrefrigerated Warehouse-No Rail	249.96	1000sqft	5.74	249,958.00	0
Parking Lot	5.74	Acre	5.74	250,034.40	0
City Park	1.94	Acre	1.94	84,506.40	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - The construction vehicle trips are reduced to 0.6 mile to represent localized emissions.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - The vehicle trips are reduced to 0.7 mile to represent localized emissions.

Consumer Products

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

- Area Coating -
- Landscape Equipment -
- Energy Use -
- Water And Wastewater -
- Solid Waste -
- Construction Off-road Equipment Mitigation -
- Area Mitigation -
- Fleet Mix -
- Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	398,639.00	199,320.00
tblArchitecturalCoating	ConstArea_Parking	15,002.00	66,440.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	7.1910e-003	0.00
tblFleetMix A	LHD2	7.1910e-003	0.04

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MCY	0.02	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.14	0.15
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MH	5.1890e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	OBUS	6.1100e-004	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	SBUS	1.0970e-003	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblFleetMix	UBUS	3.0900e-004	0.00
tblGrading	MaterialExported	0.00	24,000.00
tblLandUse	LandUseSquareFeet	249,960.00	249,958.00
tblLandUse	LotAcreage	0.36	0.18
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT Appendix A	HaulingTripLength	20.00	0.60

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	18.70
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	18.70

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	SU_TR	1.74	0.64
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	18.70
tblVehicleTrips	WD_TR	1.74	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8974	61.3693	52.1356	0.1115	24.8449	2.4330	27.2779	6.0391	2.2490	8.2881	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2966
2024	71.3769	24.5894	33.4486	0.0542	0.1971	1.0866	1.2674	0.0542	1.0125	1.0623	0.0000	5,224.8824	5,224.8824	1.3557	0.0685	5,278.5159
Maximum	71.3769	61.3693	52.1356	0.1115	24.8449	2.4330	27.2779	6.0391	2.2490	8.2881	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2966

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8974	61.3693	52.1356	0.1115	9.7728	2.4330	12.2059	2.3783	2.2490	4.6273	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2965
2024	71.3769	24.5894	33.4486	0.0542	0.1971	1.0866	1.2674	0.0542	1.0125	1.0623	0.0000	5,224.8824	5,224.8824	1.3557	0.0685	5,278.5159
Maximum	71.3769	61.3693	52.1356	0.1115	9.7728	2.4330	12.2059	2.3783	2.2490	4.6273	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2965

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	60.19	0.00	52.80	60.08	0.00	39.15	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mobile	0.4819	2.8412	3.8358	7.0100e-003	0.2570	7.5900e-003	0.2646	0.0698	7.1900e-003	0.0769		735.5449	735.5449	0.0450	0.1075	768.7012
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.6073	3.1515	4.1357	8.1900e-003	0.2570	0.0275	0.2845	0.0698	0.0271	0.0969		944.3945	944.3945	0.0528	0.1108	978.7238

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Energy	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
Mobile	0.4819	2.8412	3.8358	7.0100e-003	0.2570	7.5900e-003	0.2646	0.0698	7.1900e-003	0.0769		735.5449	735.5449	0.0450	0.1075	768.7012
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.6073	3.1515	4.1357	8.1900e-003	0.2570	0.0275	0.2845	0.0698	0.0271	0.0969		944.3945	944.3945	0.0528	0.1108	978.7238

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,320; Non-Residential Outdoor: 132,880; Striped Parking Area: 66,440 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Building Construction	9	251.00	98.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0832	1.7105	1.3514	3.3300e-003	0.0385	3.4400e-003	0.0419	0.0107	3.2900e-003	0.0140		354.1226	354.1226	5.8500e-003	0.0558	370.8817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	8.3200e-003	0.0919	8.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.2203	8.2203	1.9500e-003	1.0200e-003	8.5727
Total	0.1031	1.7188	1.4433	3.4100e-003	0.0455	3.5400e-003	0.0490	0.0126	3.3800e-003	0.0159		362.3429	362.3429	7.8000e-003	0.0568	379.4544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0832	1.7105	1.3514	3.3300e-003	0.0385	3.4400e-003	0.0419	0.0107	3.2900e-003	0.0140		354.1226	354.1226	5.8500e-003	0.0558	370.8817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	8.3200e-003	0.0919	8.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.2203	8.2203	1.9500e-003	1.0200e-003	8.5727
Total	0.1031	1.7188	1.4433	3.4100e-003	0.0455	3.5400e-003	0.0490	0.0126	3.3800e-003	0.0159		362.3429	362.3429	7.8000e-003	0.0568	379.4544

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1770	3.6394	2.8753	7.0800e-003	0.0819	7.3200e-003	0.0892	0.0227	7.0000e-003	0.0297		753.4524	753.4524	0.0124	0.1186	789.1101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0111	0.1225	1.1000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		10.9604	10.9604	2.6000e-003	1.3600e-003	11.4302
Total	0.2035	3.6505	2.9978	7.1900e-003	0.0912	7.4500e-003	0.0986	0.0252	7.1200e-003	0.0323		764.4128	764.4128	0.0150	0.1200	800.5403

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1770	3.6394	2.8753	7.0800e-003	0.0819	7.3200e-003	0.0892	0.0227	7.0000e-003	0.0297		753.4524	753.4524	0.0124	0.1186	789.1101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0111	0.1225	1.1000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		10.9604	10.9604	2.6000e-003	1.3600e-003	11.4302
Total	0.2035	3.6505	2.9978	7.1900e-003	0.0912	7.4500e-003	0.0986	0.0252	7.1200e-003	0.0323		764.4128	764.4128	0.0150	0.1200	800.5403

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0691	1.4892	1.1045	3.0700e-003	0.0569	3.1700e-003	0.0601	0.0166	3.0300e-003	0.0197		325.5628	325.5628	5.4700e-003	0.0499	340.5773
Worker	0.3323	0.1392	1.5373	1.3600e-003	0.1169	1.6500e-003	0.1185	0.0313	1.5200e-003	0.0328		137.5531	137.5531	0.0327	0.0170	143.4494
Total	0.4014	1.6284	2.6418	4.4300e-003	0.1738	4.8200e-003	0.1787	0.0480	4.5500e-003	0.0525		463.1159	463.1159	0.0382	0.0670	484.0267

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0691	1.4892	1.1045	3.0700e-003	0.0569	3.1700e-003	0.0601	0.0166	3.0300e-003	0.0197		325.5628	325.5628	5.4700e-003	0.0499	340.5773
Worker	0.3323	0.1392	1.5373	1.3600e-003	0.1169	1.6500e-003	0.1185	0.0313	1.5200e-003	0.0328		137.5531	137.5531	0.0327	0.0170	143.4494
Total	0.4014	1.6284	2.6418	4.4300e-003	0.1738	4.8200e-003	0.1787	0.0480	4.5500e-003	0.0525		463.1159	463.1159	0.0382	0.0670	484.0267

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0685	1.4854	1.0960	3.0200e-003	0.0569	3.1400e-003	0.0601	0.0166	3.0000e-003	0.0196		320.5169	320.5169	5.5000e-003	0.0491	335.2928
Worker	0.3065	0.1280	1.4720	1.3200e-003	0.1169	1.5700e-003	0.1185	0.0313	1.4500e-003	0.0328		133.1615	133.1615	0.0301	0.0162	138.7286
Total	0.3749	1.6134	2.5680	4.3400e-003	0.1738	4.7100e-003	0.1785	0.0480	4.4500e-003	0.0524		453.6784	453.6784	0.0356	0.0653	474.0214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0685	1.4854	1.0960	3.0200e-003	0.0569	3.1400e-003	0.0601	0.0166	3.0000e-003	0.0196		320.5169	320.5169	5.5000e-003	0.0491	335.2928
Worker	0.3065	0.1280	1.4720	1.3200e-003	0.1169	1.5700e-003	0.1185	0.0313	1.4500e-003	0.0328		133.1615	133.1615	0.0301	0.0162	138.7286
Total	0.3749	1.6134	2.5680	4.3400e-003	0.1738	4.7100e-003	0.1785	0.0480	4.4500e-003	0.0524		453.6784	453.6784	0.0356	0.0653	474.0214

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906
Total	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7519					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7401	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906
Total	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352
Total	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.2886					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	69.4694	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352
Total	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4819	2.8412	3.8358	7.0100e-003	0.2570	7.5900e-003	0.2646	0.0698	7.1900e-003	0.0769		735.5449	735.5449	0.0450	0.1075	768.7012

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.4819	2.8412	3.8358	7.0100e-003	0.2570	7.5900e-003	0.2646	0.0698	7.1900e-003	0.0769		735.5449	735.5449	0.0450	0.1075	768.7012
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	75,283	75,283
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	40,761	40,761
Total	455.43	455.43	455.43	116,045	116,045

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	0.70	0.70	0.70	33.00	48.00	19.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.70	0.70	0.70	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix Appendix A

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729
NaturalGas Unmitigated	0.0165	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4400e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	148.477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1376.48	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.148477	1.6000e-003	0.0146	0.0122	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003		17.4679	17.4679	3.3000e-004	3.2000e-004	17.5717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.37648	0.0148	0.1350	0.1134	8.1000e-004		0.0103	0.0103		0.0103	0.0103		161.9390	161.9390	3.1000e-003	2.9700e-003	162.9013
Total		0.0164	0.1495	0.1256	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.4068	179.4068	3.4300e-003	3.2900e-003	180.4729

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0515 Appendix A	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6940					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5700e-003	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638
Total	6.0515	2.5000e-004	0.0279	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0598	0.0598	1.6000e-004		0.0638

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S1 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S2 LST

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - The vehicle trips are reduced to 0.6 mile to represent localized emissions.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - The vehicle trips are reduced to 0.7 mile to represent localized emissions.

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix - Please see fleet mix adjustment in Appendix.

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	122,222.00	61,111.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	366,666.00	183,333.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix Appendix A	LDT2	0.17	0.00

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tb\FleetMix	LHD1	0.03	0.00
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD2	7.1910e-003	0.00
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MDV	0.14	0.15
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MHD	0.01	0.00
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\Grading Appendix A	MaterialExported	0.00	24,000.00

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	61,110.00	61,111.00
tblLandUse	LandUseSquareFeet	177,330.00	177,332.00
tblLandUse	LandUseSquareFeet	104,544.00	104,694.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70

Appendix A

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	77.00
tblVehicleTrips	ST_TR	6.42	0.46
tblVehicleTrips	ST_TR	1.74	0.61
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	77.00
tblVehicleTrips	SU_TR	5.09	0.46
tblVehicleTrips	SU_TR	1.74	0.61
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	77.00
tblVehicleTrips	WD_TR	3.93	0.46
tblVehicleTrips	WD_TR	1.74	0.61

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)**

Appendix A

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9494	60.9545	51.9961	0.1114	24.8449	2.4326	27.2775	6.0391	2.2487	8.2877	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233
2024	62.2319	24.4706	33.2927	0.0542	0.1951	1.0865	1.2653	0.0537	1.0123	1.0616	0.0000	5,226.4917	5,226.4917	1.3515	0.0665	5,279.4543
Maximum	62.2319	60.9545	51.9961	0.1114	24.8449	2.4326	27.2775	6.0391	2.2487	8.2877	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.9494	60.9545	51.9961	0.1114	9.7728	2.4326	12.2055	2.3783	2.2487	4.6269	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233
2024	62.2319	24.4706	33.2927	0.0542	0.1951	1.0865	1.2653	0.0537	1.0123	1.0616	0.0000	5,226.4917	5,226.4917	1.3515	0.0665	5,279.4543
Maximum	62.2319	60.9545	51.9961	0.1114	9.7728	2.4326	12.2055	2.3783	2.2487	4.6269	0.0000	10,866.4805	10,866.4805	3.0177	0.1735	10,993.6233

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Appendix A																

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Percent Reduction	0.00	0.00	0.00	0.00	60.19	0.00	52.80	60.08	0.00	39.16	0.00	0.00	0.00	0.00	0.00	0.00
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2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	0.7963	2.3464	4.1720	6.8500e-003	0.2874	7.3900e-003	0.2948	0.0776	6.9700e-003	0.0845		715.2906	715.2906	0.0563	0.1024	747.2212
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.4966	3.1391	4.8750	0.0109	0.2874	0.0640	0.3513	0.0776	0.0635	0.1411		1,503.0644	1,503.0644	0.0750	0.1163	1,539.6079

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	0.7963	2.3464	4.1720	6.8500e-003	0.2874	7.3900e-003	0.2948	0.0776	6.9700e-003	0.0845		715.2906	715.2906	0.0563	0.1024	747.2212
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.4966	3.1391	4.8750	0.0109	0.2874	0.0640	0.3513	0.0776	0.0635	0.1411		1,503.0644	1,503.0644	0.0750	0.1163	1,539.6079

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,333; Non-Residential Outdoor: 61,111; Striped Parking Area: 14,610 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Building Construction	9	248.00	97.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0957	1.5781	1.3103	3.2700e-003	0.0385	3.3200e-003	0.0418	0.0107	3.1800e-003	0.0139		347.6523	347.6523	6.4500e-003	0.0547	364.1232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	8.0000e-003	0.0872	9.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.8631	8.8631	1.7000e-003	9.9000e-004	9.2006
Total	0.1211	1.5861	1.3975	3.3600e-003	0.0455	3.4200e-003	0.0489	0.0126	3.2700e-003	0.0158		356.5155	356.5155	8.1500e-003	0.0557	373.3238

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0957	1.5781	1.3103	3.2700e-003	0.0385	3.3200e-003	0.0418	0.0107	3.1800e-003	0.0139		347.6523	347.6523	6.4500e-003	0.0547	364.1232
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0255	8.0000e-003	0.0872	9.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.8631	8.8631	1.7000e-003	9.9000e-004	9.2006
Total	0.1211	1.5861	1.3975	3.3600e-003	0.0455	3.4200e-003	0.0489	0.0126	3.2700e-003	0.0158		356.5155	356.5155	8.1500e-003	0.0557	373.3238

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2035	3.3577	2.7878	6.9500e-003	0.0819	7.0700e-003	0.0889	0.0227	6.7600e-003	0.0295		739.6858	739.6858	0.0137	0.1165	774.7302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0107	0.1163	1.2000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		11.8175	11.8175	2.2700e-003	1.3200e-003	12.2674
Total	0.2375	3.3684	2.9041	7.0700e-003	0.0912	7.2000e-003	0.0984	0.0252	6.8800e-003	0.0321		751.5033	751.5033	0.0160	0.1178	786.9977

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2035	3.3577	2.7878	6.9500e-003	0.0819	7.0700e-003	0.0889	0.0227	6.7600e-003	0.0295		739.6858	739.6858	0.0137	0.1165	774.7302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0339	0.0107	0.1163	1.2000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		11.8175	11.8175	2.2700e-003	1.3200e-003	12.2674
Total	0.2375	3.3684	2.9041	7.0700e-003	0.0912	7.2000e-003	0.0984	0.0252	6.8800e-003	0.0321		751.5033	751.5033	0.0160	0.1178	786.9977

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0770	1.3771	1.0465	3.0000e-003	0.0564	3.0400e-003	0.0594	0.0165	2.9000e-003	0.0194		317.7758	317.7758	5.7500e-003	0.0487	332.4257
Worker	0.4208	0.1322	1.4417	1.4500e-003	0.1155	1.6300e-003	0.1171	0.0309	1.5000e-003	0.0324		146.5367	146.5367	0.0281	0.0164	152.1162
Total	0.4978	1.5094	2.4882	4.4500e-003	0.1719	4.6700e-003	0.1765	0.0474	4.4000e-003	0.0518		464.3126	464.3126	0.0339	0.0651	484.5419

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0770	1.3771	1.0465	3.0000e-003	0.0564	3.0400e-003	0.0594	0.0165	2.9000e-003	0.0194		317.7758	317.7758	5.7500e-003	0.0487	332.4257
Worker	0.4208	0.1322	1.4417	1.4500e-003	0.1155	1.6300e-003	0.1171	0.0309	1.5000e-003	0.0324		146.5367	146.5367	0.0281	0.0164	152.1162
Total	0.4978	1.5094	2.4882	4.4500e-003	0.1719	4.6700e-003	0.1765	0.0474	4.4000e-003	0.0518		464.3126	464.3126	0.0339	0.0651	484.5419

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0763	1.3733	1.0387	2.9500e-003	0.0564	3.0100e-003	0.0594	0.0165	2.8800e-003	0.0194		312.8201	312.8201	5.7900e-003	0.0479	327.2361
Worker	0.3890	0.1216	1.3781	1.4000e-003	0.1155	1.5500e-003	0.1171	0.0309	1.4300e-003	0.0324		141.8461	141.8461	0.0258	0.0155	147.1161
Total	0.4653	1.4949	2.4168	4.3500e-003	0.1719	4.5600e-003	0.1764	0.0474	4.3100e-003	0.0517		454.6662	454.6662	0.0316	0.0634	474.3521

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0763	1.3733	1.0387	2.9500e-003	0.0564	3.0100e-003	0.0594	0.0165	2.8800e-003	0.0194		312.8201	312.8201	5.7900e-003	0.0479	327.2361
Worker	0.3890	0.1216	1.3781	1.4000e-003	0.1155	1.5500e-003	0.1171	0.0309	1.4300e-003	0.0324		141.8461	141.8461	0.0258	0.0155	147.1161
Total	0.4653	1.4949	2.4168	4.3500e-003	0.1719	4.5600e-003	0.1764	0.0474	4.3100e-003	0.0517		454.6662	454.6662	0.0316	0.0634	474.3521

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982
Total	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982
Total	0.0235	7.3500e-003	0.0834	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.5794	8.5794	1.5600e-003	9.4000e-004	8.8982

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605
Total	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605
Total	0.0784	0.0245	0.2779	2.8000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		28.5980	28.5980	5.2100e-003	3.1300e-003	29.6605

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7963	2.3464	4.1720	6.8500e-003	0.2874	7.3900e-003	0.2948	0.0776	6.9700e-003	0.0845		715.2906	715.2906	0.0563	0.1024	747.2212

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.7963	2.3464	4.1720	6.8500e-003	0.2874	7.3900e-003	0.2948	0.0776	6.9700e-003	0.0845		715.2906	715.2906	0.0563	0.1024	747.2212
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	96,907	96,907
Manufacturing	28.11	28.11	28.11	7,163	7,163
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	27,562	27,562
Total	598.28	598.28	598.28	131,631	131,631

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	0.70	0.70	0.70	33.00	48.00	19.00	77	19	4
Manufacturing	0.70	0.70	0.70	59.00	28.00	13.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.70	0.70	0.70	59.00	0.00	41.00	100	0	0

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
NaturalGas Unmitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	56.3836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728	
Manufacturing	5412.93	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	976.541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699	
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419	

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0563836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5.41293	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.976541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Appendix A																

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Unmitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Riverside Palmyrita Avenue Project S2 LST

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
Manufacturing	61.11	1000sqft	1.40	61,111.00	0
Unrefrigerated Warehouse-No Rail	177.33	1000sqft	4.07	177,332.00	0
Parking Lot	5.59	Acre	5.59	243,500.40	0
City Park	2.40	Acre	2.40	104,694.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Trips and VMT - The vehicle trips are reduced to 0.6 mile to represent localized emissions.

Demolition -

Grading -

Architectural Coating -

Vehicle Trips - The vehicle trips are reduced to 0.7 mile to represent localized emissions.

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Consumer Products -

Area Coating -

Landscape Equipment -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	122,222.00	61,111.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	366,666.00	183,333.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	300.00	200.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.63
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.59
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tb\FleetMix	LHD1	0.03	0.00
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD1	0.03	0.13
tb\FleetMix	LHD2	7.1910e-003	0.00
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	LHD2	7.1910e-003	0.04
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MCY	0.02	0.00
tb\FleetMix	MDV	0.14	0.15
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MDV	0.14	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MH	5.1890e-003	0.00
tb\FleetMix	MHD	0.01	0.00
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	MHD	0.01	0.21
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	OBUS	6.1100e-004	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	SBUS	1.0970e-003	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\FleetMix	UBUS	3.0900e-004	0.00
tb\Grading Appendix A	MaterialExported	0.00	24,000.00

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblLandUse	LandUseSquareFeet	61,110.00	61,111.00
tblLandUse	LandUseSquareFeet	177,330.00	177,332.00
tblLandUse	LandUseSquareFeet	104,544.00	104,694.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	250.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	HaulingTripLength	20.00	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	VendorTripLength	7.90	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblTripsAndVMT	WorkerTripLength	19.80	0.60
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70
tblVehicleTrips	CC_TL	10.10	0.70

Appendix A

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CNW_TL	7.90	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	CW_TL	18.50	0.70
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	77.00
tblVehicleTrips	ST_TR	6.42	0.46
tblVehicleTrips	ST_TR	1.74	0.61
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	77.00
tblVehicleTrips	SU_TR	5.09	0.46
tblVehicleTrips	SU_TR	1.74	0.61
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	77.00
tblVehicleTrips	WD_TR	3.93	0.46
tblVehicleTrips	WD_TR	1.74	0.61

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)**

Appendix A

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8974	61.3693	52.1356	0.1115	24.8449	2.4330	27.2779	6.0391	2.2490	8.2881	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2966
2024	62.1197	24.5727	33.4198	0.0541	0.1951	1.0866	1.2654	0.0537	1.0124	1.0617	0.0000	5,220.0202	5,220.0202	1.3553	0.0678	5,273.4365
Maximum	62.1197	61.3693	52.1356	0.1115	24.8449	2.4330	27.2779	6.0391	2.2490	8.2881	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2966

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8974	61.3693	52.1356	0.1115	9.7728	2.4330	12.2059	2.3783	2.2490	4.6273	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2965
2024	62.1197	24.5727	33.4198	0.0541	0.1951	1.0866	1.2654	0.0537	1.0124	1.0617	0.0000	5,220.0202	5,220.0202	1.3553	0.0678	5,273.4365
Maximum	62.1197	61.3693	52.1356	0.1115	9.7728	2.4330	12.2059	2.3783	2.2490	4.6273	0.0000	10,885.2175	10,885.2175	3.0164	0.1767	11,013.2965

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Appendix A																

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Percent Reduction	0.00	0.00	0.00	0.00	60.19	0.00	52.80	60.08	0.00	39.15	0.00	0.00	0.00	0.00	0.00	0.00
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2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	0.6483	2.5208	4.4247	6.7700e-003	0.2874	7.5400e-003	0.2949	0.0776	7.1100e-003	0.0847		707.4704	707.4704	0.0627	0.1045	740.1858
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.3486	3.3135	5.1277	0.0108	0.2874	0.0641	0.3515	0.0776	0.0637	0.1412		1,495.2442	1,495.2442	0.0815	0.1184	1,532.5726

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Energy	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
Mobile	0.6483	2.5208	4.4247	6.7700e-003	0.2874	7.5400e-003	0.2949	0.0776	7.1100e-003	0.0847		707.4704	707.4704	0.0627	0.1045	740.1858
Stationary	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	6.3486	3.3135	5.1277	0.0108	0.2874	0.0641	0.3515	0.0776	0.0637	0.1412		1,495.2442	1,495.2442	0.0815	0.1184	1,532.5726

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/20/2023	12/15/2023	5	20	
2	Grading	Grading	11/20/2023	12/15/2023	5	20	
3	Building Construction	Building Construction	12/18/2023	9/20/2024	5	200	
4	Paving	Paving	7/29/2024	8/23/2024	5	20	

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5	Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 60

Acres of Paving: 5.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,333; Non-Residential Outdoor: 61,111; Striped Parking Area: 14,610 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	1,410.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	3,000.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Building Construction	9	248.00	97.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	0.60	0.60	0.60	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.3527	0.0000	15.3527	2.3245	0.0000	2.3245			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	15.3527	0.9975	16.3502	2.3245	0.9280	3.2525		3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0832	1.7105	1.3514	3.3300e-003	0.0385	3.4400e-003	0.0419	0.0107	3.2900e-003	0.0140		354.1226	354.1226	5.8500e-003	0.0558	370.8817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	8.3200e-003	0.0919	8.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.2203	8.2203	1.9500e-003	1.0200e-003	8.5727
Total	0.1031	1.7188	1.4433	3.4100e-003	0.0455	3.5400e-003	0.0490	0.0126	3.3800e-003	0.0159		362.3429	362.3429	7.8000e-003	0.0568	379.4544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.9876	0.0000	5.9876	0.9066	0.0000	0.9066			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	5.9876	0.9975	6.9851	0.9066	0.9280	1.8346	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0832	1.7105	1.3514	3.3300e-003	0.0385	3.4400e-003	0.0419	0.0107	3.2900e-003	0.0140		354.1226	354.1226	5.8500e-003	0.0558	370.8817
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	8.3200e-003	0.0919	8.0000e-005	6.9900e-003	1.0000e-004	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		8.2203	8.2203	1.9500e-003	1.0200e-003	8.5727
Total	0.1031	1.7188	1.4433	3.4100e-003	0.0455	3.5400e-003	0.0490	0.0126	3.3800e-003	0.0159		362.3429	362.3429	7.8000e-003	0.0568	379.4544

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3556	0.0000	9.3556	3.6768	0.0000	3.6768			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	9.3556	1.4245	10.7800	3.6768	1.3105	4.9873		6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1770	3.6394	2.8753	7.0800e-003	0.0819	7.3200e-003	0.0892	0.0227	7.0000e-003	0.0297		753.4524	753.4524	0.0124	0.1186	789.1101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0111	0.1225	1.1000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		10.9604	10.9604	2.6000e-003	1.3600e-003	11.4302
Total	0.2035	3.6505	2.9978	7.1900e-003	0.0912	7.4500e-003	0.0986	0.0252	7.1200e-003	0.0323		764.4128	764.4128	0.0150	0.1200	800.5403

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.6487	0.0000	3.6487	1.4339	0.0000	1.4339			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.6487	1.4245	5.0732	1.4339	1.3105	2.7445	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1770	3.6394	2.8753	7.0800e-003	0.0819	7.3200e-003	0.0892	0.0227	7.0000e-003	0.0297		753.4524	753.4524	0.0124	0.1186	789.1101
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0265	0.0111	0.1225	1.1000e-004	9.3100e-003	1.3000e-004	9.4500e-003	2.4900e-003	1.2000e-004	2.6200e-003		10.9604	10.9604	2.6000e-003	1.3600e-003	11.4302
Total	0.2035	3.6505	2.9978	7.1900e-003	0.0912	7.4500e-003	0.0986	0.0252	7.1200e-003	0.0323		764.4128	764.4128	0.0150	0.1200	800.5403

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0684	1.4740	1.0932	3.0400e-003	0.0564	3.1300e-003	0.0595	0.0165	3.0000e-003	0.0195		322.2407	322.2407	5.4100e-003	0.0494	337.1021
Worker	0.3284	0.1375	1.5189	1.3400e-003	0.1155	1.6300e-003	0.1171	0.0309	1.5000e-003	0.0324		135.9091	135.9091	0.0323	0.0168	141.7349
Total	0.3968	1.6115	2.6121	4.3800e-003	0.1719	4.7600e-003	0.1766	0.0474	4.5000e-003	0.0519		458.1498	458.1498	0.0377	0.0663	478.8369

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0684	1.4740	1.0932	3.0400e-003	0.0564	3.1300e-003	0.0595	0.0165	3.0000e-003	0.0195		322.2407	322.2407	5.4100e-003	0.0494	337.1021
Worker	0.3284	0.1375	1.5189	1.3400e-003	0.1155	1.6300e-003	0.1171	0.0309	1.5000e-003	0.0324		135.9091	135.9091	0.0323	0.0168	141.7349
Total	0.3968	1.6115	2.6121	4.3800e-003	0.1719	4.7600e-003	0.1766	0.0474	4.5000e-003	0.0519		458.1498	458.1498	0.0377	0.0663	478.8369

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0678	1.4703	1.0849	2.9900e-003	0.0564	3.1000e-003	0.0595	0.0165	2.9700e-003	0.0194		317.2463	317.2463	5.4500e-003	0.0486	331.8715
Worker	0.3028	0.1264	1.4544	1.3000e-003	0.1155	1.5500e-003	0.1171	0.0309	1.4300e-003	0.0324		131.5700	131.5700	0.0297	0.0160	137.0705
Total	0.3705	1.5967	2.5393	4.2900e-003	0.1719	4.6500e-003	0.1765	0.0474	4.4000e-003	0.0518		448.8163	448.8163	0.0351	0.0646	468.9419

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0678	1.4703	1.0849	2.9900e-003	0.0564	3.1000e-003	0.0595	0.0165	2.9700e-003	0.0194		317.2463	317.2463	5.4500e-003	0.0486	331.8715
Worker	0.3028	0.1264	1.4544	1.3000e-003	0.1155	1.5500e-003	0.1171	0.0309	1.4300e-003	0.0324		131.5700	131.5700	0.0297	0.0160	137.0705
Total	0.3705	1.5967	2.5393	4.2900e-003	0.1719	4.6500e-003	0.1765	0.0474	4.4000e-003	0.0518		448.8163	448.8163	0.0351	0.0646	468.9419

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906
Total	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.7323					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7205	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906
Total	0.0183	7.6500e-003	0.0880	8.0000e-005	6.9900e-003	9.0000e-005	7.0800e-003	1.8700e-003	9.0000e-005	1.9600e-003		7.9579	7.9579	1.8000e-003	9.7000e-004	8.2906

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352
Total	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.0358					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	60.2165	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352
Total	0.0611	0.0255	0.2932	2.6000e-004	0.0233	3.1000e-004	0.0236	6.2400e-003	2.9000e-004	6.5300e-003		26.5262	26.5262	5.9900e-003	3.2200e-003	27.6352

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6483	2.5208	4.4247	6.7700e-003	0.2874	7.5400e-003	0.2949	0.0776	7.1100e-003	0.0847		707.4704	707.4704	0.0627	0.1045	740.1858

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.6483	2.5208	4.4247	6.7700e-003	0.2874	7.5400e-003	0.2949	0.0776	7.1100e-003	0.0847		707.4704	707.4704	0.0627	0.1045	740.1858
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	96,907	96,907
Manufacturing	28.11	28.11	28.11	7,163	7,163
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	27,562	27,562
Total	598.28	598.28	598.28	131,631	131,631

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	18.50	10.10	7.90	33.00	48.00	19.00	66	28	6
General Office Building	0.70	0.70	0.70	33.00	48.00	19.00	77	19	4
Manufacturing	0.70	0.70	0.70	59.00	28.00	13.00	100	0	0
Parking Lot	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.70	0.70	0.70	59.00	0.00	41.00	100	0	0

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
General Office Building	0.594000	0.062000	0.191000	0.153000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Manufacturing	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.132000	0.037000	0.206000	0.625000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419
NaturalGas Unmitigated	0.0695	0.6320	0.5308	3.7900e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	56.3836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728	
Manufacturing	5412.93	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	976.541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699	
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419	

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0563836	6.1000e-004	5.5300e-003	4.6400e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.6334	6.6334	1.3000e-004	1.2000e-004	6.6728
Manufacturing	5.41293	0.0584	0.5307	0.4458	3.1800e-003		0.0403	0.0403		0.0403	0.0403		636.8150	636.8150	0.0122	0.0117	640.5993
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.976541	0.0105	0.0957	0.0804	5.7000e-004		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003		114.8871	114.8871	2.2000e-003	2.1100e-003	115.5699
Total		0.0695	0.6320	0.5308	3.7800e-003		0.0480	0.0480		0.0480	0.0480		758.3355	758.3355	0.0145	0.0139	762.8419

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Appendix A																

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Unmitigated	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6394					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9316					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3800e-003	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589
Total	5.5734	2.3000e-004	0.0257	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0552	0.0552	1.4000e-004		0.0589

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Riverside Palmyrita Avenue Project S2 LST - Riverside-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.14	50	250	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Fire Pump - Diesel (175 - 300 HP)	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860
Total	0.0574	0.1605	0.1465	2.8000e-004		8.4500e-003	8.4500e-003		8.4500e-003	8.4500e-003		29.3830	29.3830	4.1200e-003		29.4860

11.0 Vegetation

DEMOLITION CALCULATIONS

Parameters ¹			
1	building st	10	cf building volume
1	cf building volume	0.25	cf waste volume
1	cf	0.037	cy
1	cy waste volume	0.5	ton waste weight
1	sf	0.04625	ton waste material

Description	square feet ²	height/ depth (ft) ³	density (lbs/cf) ⁴	Demolition Weight (pounds)	Demolition Weight (tons)
Buildings	99,165	-	-	-	4,586.38
Pavement	258,000	0.5	150	19,350,000	9,675.00
					14,261

Notes:

- cy = cubic yard
- gsf = gross square feet
- sf = square feet
- cf = cubic feet

¹ Source: California Air Pollution Control Officers Association (CAPCOA). 2017. Appendix A Calculation Details for CalEEMod. October.

² Source: information provided by project applicant

³ Source: DC Construction Services. 2017. How Thick Is Parking Lot Asphalt? Website: <https://dccpaving.com/how-thick-is-parking-lot-asphalt/>

⁴ Source: SFGate. 2019. How to Calculate Asphalt Weight Per Yard. Website: <https://homeguides.sfgate.com/calculate-asphalt-weight-per-yard-81825.html>

Operational Vehicle Trip Generation Rate Adjustments Scenario 1

Trip-Generating CalEEMod Land Use	Size Metric	Size	Default Trip Generation Rates ¹			Daily Trips ²	Adjusted Trip Generation Rates ² (Based on proportional change to weekday trips)		
			Weekday	Saturday	Sunday		Weekday	Saturday	Sunday
			Unrefrigerated Warehouse-No Rail	1000sqft	249.958		1.74	1.74	1.74
General Office Building	1000sqft	15.8	9.74	9.74	9.74	296	18.73	18.7	18.7

Operational Vehicle Trip Generation Rate Adjustments Scenario 2

Trip-Generating CalEEMod Land Use	Size Metric	Size	Default Trip Generation Rates ¹			Daily Trips ²	Adjusted Trip Generation Rates ²		
			Weekday	Saturday	Sunday		Weekday	Saturday	Sunday
			Unrefrigerated Warehouse-No Rail	1000sqft	177.332		1.74	1.74	1.74
Manufacturing	1000sqft	61.111	3.93	3.93	3.93	28	0.46	0.46	0.46
General Office Building	1000sqft	6	9.74	9.74	9.74	462	77.00	77.00	77.00

Notes/Sources:

¹ California Air Pollution Control Officers Association (CAPCOA). 2022. California Emissions Estimator Model (CalEEMod), Version 2020.4.0.

² Urban Crossroad. 2022. Iowa & Palmyrita Warehouses Vehicle Miles Traveled (VMT) Analysis. August.

Project Fleet Mix Adjustments (2024)

CalEEMod Riverside County 2024 Operational Year Default Fleet Mix														Total
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.537845	0.056225	0.173186	0.1384	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189	1.000
Trucks Only*	LDA	LDT1	LDT2	MDV	2-Axle LHD1	2-Axle LHD2	3-Axle MHD	4-Axle HHD	OBUS	UBUS	MCY	SBUS	MH	
	0	0	0	0	0.0259	0.0072	0.0114	0.0188	0	0	0	0	0	0.063
Truck Trips based on Traffic Study					27		33	100						160
Adjusted Truck Fleet Mix 2024 for Warehouse Land Use in CalEEMod	0	0	0	0	0.132	0.037	0.206	0.625	0	0	0	0	0	1.000
Passenger Cars Default Light Duty Fleet Mix	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.538	0.056	0.173	0.138	0	0	0	0	0	0	0	0	0	0.906
Difference to be allocated	0.094													
Adjusted Passenger Cars Fleet Mix 2024 for Office Land Use in CalEEMod	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.594	0.062	0.191	0.153	0	0	0	0	0	0	0	0	0	1.000
Scenario 1 Daily Trips	Cars	Trucks	Total Daily Trips											
	296	160	456											
Scenario 2 Daily Trips	Cars	Trucks	Total Daily Trips											
	462	136	598											

Note: Scenario 1 and Scenario 2 have different number of trips, but they have the same fleet mix ratio for Truck and Passenger Car catogroies.

**Appendix B:
Health Risk Assessments**

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Appendix B: Health Risk Assessments

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Palmyrita Avenue Warehouse Project

DPM

Emission Assumptions

Emission Factors

1) Truck Emissions

(1) EMFAC2017 for running emissions

(a) Calculations for Riverside County portion of South Coast Air Basin
Fleet mix consistent with the buildout year CalEEMod run and based on TIA

(b) Truck Mix based on TIA

(c) Truck Idle Two instances per trip

(d) Onsite Vehicle Travel Speed 5 mph for trucks

(e) Offsite Vehicle Travel Speed

5-25 mph aggregated for trucks

Traffic Allocation

1) Traffic distribution based on site layout identified in the site plan

2) Project-specific trip generation

3) Onsite travel emissions generated from diesel vehicles

4) Onsite idling emissions generated only by trucks

Emission Source Configuration

1) Project onsite truck traffic represented by a line source

2) Project onsite truck idling represented as line sources (series of point sources)

3) Offsite vehicles represented by a line source

Onsite Vehicle Travel Segments

Segment

On-site Truck Route 1

On-site Truck Route 2

Source ID

SLINE1

SLINE2

Segment Travel Distance (m)

343.7

577.0

On-site Truck Travel Route 1

On-site Truck Travel Route 2

Onsite Truck Idling

On-site Idling – Location 1

On-site Idling – Location 2

On-site Idling – Location 3

SLINE3

SLINE4

VOL1

91.9

77.4

14.5

Loading Docks Building 1

Loading Docks Building 2

Trailer Parking

Offsite Vehicle Travel Segments

Segment

Off-site Truck Travel

SLINE5

Segment Travel Distance (m)

959.5

Off-site Truck Travel

Other Input Parameters

Facility Operations (hr/day):

24

Palmyrita Avenue Warehouse Project

Vehicle Fleet Mix

Total Daily Truck Trips (Trips/day)	Daily Trips Fleet Mix	Trucks 160 100.0%	Total Daily Truck Trips 160 100.0%
160	—		
160			

Vehicle Fleet

	Trucks Project Vehicle Mix	EMFAC % Diesel	Total Number of Daily Trips	Number of Daily Diesel Trips	Number of Daily Non- Trips	Total Number of Daily Trips	% Diesel Trips	% Non- Diesel Trips	Total Trips
LHDT1 (2-axle truck)	13.2%	45.9%	21	9.7	11	21	6.06%	7.14%	
LHDT2 (2-axle truck)	3.7%	73.7%	6	4.4	2	6	2.73%	0.97%	
MHDT (3 axle truck)	20.6%	100.0%	33	33.0	0	33	20.60%	0.00%	
HHDT (4+ axle truck)	62.5%	100.0%	100	100.0	0	100	62.50%	0.00%	
Truck Subtotal	100.0%		160	147.0	13	160	91.88%	8.12%	100.00%

Truck fleet mix consistent with the project CalEEMod runs used in the Air Quality Analysis and is consistent with the project-specific traffic information. Assumed 100% diesel for MHDT and HHDT; % Diesel taken from EMFAC2021 for LHDT1, and LHDT2.

Palmyrita Avenue Warehouse Project

Trip Distribution

Vehicle Allocation - Number of Daily Diesel Trips

Allocation of Building Trips

Percent Allocation - On-site Travel

50% On-site Travel – Route 1 (DSL trucks)
 50% On-site Travel – Route 2 (DSL trucks)
 100% Total Diesel Truck Trips

Segment - On-site Travel	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	MH	Total
On-site Truck Route 1	SLINE1	0.0	0.0	0.0	0.0	4.8	2.2	16.5	50.0	0.0	0.0	0.0	0.0	73.5
On-site Truck Route 2	SLINE2	0.0	0.0	0.0	0.0	4.8	2.2	16.5	50.0	0.0	0.0	0.0	0.0	73.5
Total Diesel Trucks	—	0	0	0	0	10	4	33	100	0	0	0	0	147

Percent Allocation of Trips - On-site Diesel Truck Idling

50.0% On-site Idling – Location 1 Loading Docks Building 1
 50.0% On-site Idling – Location 2 Loading Docks Building 2
 100.0% On-site Idling – Location 3 Trailer Parking
 200% Total Diesel Truck Trips (two occurrences per trip)

Segment - On-site Truck Idle	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	MH	Total
On-site Idling – Location 1	SLINE3	0.0	0.0	0.0	0.0	4.8	2.2	16.5	50.0	0.0	0.0	0.0	0.0	73.5
On-site Idling – Location 2	SLINE4	0.0	0.0	0.0	0.0	4.8	2.2	16.5	50.0	0.0	0.0	0.0	0.0	73.5
On-site Idling – Location 3	VOL1	0.0	0.0	0.0	0.0	9.7	4.4	33.0	100.0	0.0	0.0	0.0	0.0	147.0
Total Idling (Diesel Trucks Idling)	—	0	0	0	0	19	9	66	200	0	0	0	0	294

Palmyrita Avenue Warehouse Project

Diesel Vehicle Emissions

Processes Modeled

Diesel vehicle exhaust

Diesel vehicle idling

Facility Operations

24 hrs/day, 52 weeks/year

On-site Travel Links Modeled

Link	Truck Type	Average Speed (mph)	Emission Factor (g/mi)	Trips per Daily (in and out)	Link Length (m)	Link Length (mi)	Ave Emissions Over Link (g/day)	Ave Emissions (lbs/day)	Average Emissions (g/sec)	Emissions for all Vehicles (g/sec)
SLINE1	LHDT1	5	0.105	4.8	343.7	0.21	1.090E-01	2.40E-04	1.262E-06	5.05E-06
	LHDT2	5	0.094	2.2	343.7	0.21	4.391E-02	9.67E-05	5.083E-07	
	MHDT	5	0.041	16.5	343.7	0.21	1.441E-01	3.17E-04	1.667E-06	
	HHDT	5	0.013	50.0	343.7	0.21	1.395E-01	3.07E-04	1.615E-06	
SLINE2	LHDT1	5	0.105	4.8	577	0.36	1.83E-01	4.03E-04	2.12E-06	8.48E-06
	LHDT2	5	0.094	2.2	577	0.36	7.37E-02	1.62E-04	8.53E-07	
	MHDT	5	0.041	16.5	577	0.36	2.42E-01	5.33E-04	2.80E-06	
	HHDT	5	0.013	50.0	577	0.36	2.34E-01	5.16E-04	2.71E-06	

Palmyrita Avenue Warehouse Project

Diesel Truck Idling Emissions

Onsite Vehicle Travel Segments	Truck Type	DPM Emission Factor (grams/trip)	Number Idling Vehicle Trips/day	Emissions (g/day)	Emissions (lb/day)	Average Emissions (g/sec)	Total Emissions for all Vehicles (g/sec)
SLINE3	LHDT1	0.027	4.8	1.32E-01	2.92E-04	1.53E-06	
	LHDT2	0.027	2.2	5.96E-02	1.31E-04	6.89E-07	
	MHDT	0.024	16.5	3.98E-01	8.77E-04	4.61E-06	
	HHDT	0.030	50.0	1.49E+00	3.29E-03	1.73E-05	2.4116E-05
SLINE4	LHDT1	0.027	4.8	1.32E-01	2.92E-04	1.53E-06	
	LHDT2	0.027	2.2	5.96E-02	1.31E-04	6.89E-07	
	MHDT	0.024	16.5	3.98E-01	8.77E-04	4.61E-06	
	HHDT	0.030	50.0	1.49E+00	3.29E-03	1.73E-05	2.4116E-05
VOL1	LHDT1	0.027	9.7	2.65E-01	5.83E-04	3.07E-06	
	LHDT2	0.027	4.4	1.19E-01	2.62E-04	1.38E-06	
	MHDT	0.024	33.0	7.96E-01	1.75E-03	9.22E-06	
	HHDT	0.030	100.0	2.99E+00	6.58E-03	3.46E-05	4.8232E-05

Palmyrita Avenue Warehouse Project

Project Operations

24 hours/day

Emission Rates

Running Emissions 5-25 mph Averaged (EMFAC2021 for the South Coast Air Basin portion of Riverside County by vehicle type and speed)

Offsite DSL Truck Roadway Emissions

Segment ID	Description	% total Trips
SLINE5	Off-site Truck Travel	100.0%

Segment ID:

SLINE5

Travel Distance:

959.5 meters

Operations

24 hours/day

Vehicle Class	Daily Trips (trips/day)	Emission Factor (g/mi)	Travel Distance (mi)	Emissions (g/day)	Emissions (g/sec)
LHDT1-DSL	9.7	0.0737709	0.60	0.426	4.93E-06
LHDT2-DSL	4.4	0.0674369	0.60	0.175	2.03E-06
MHDT-DSL	33.0	0.0237055	0.60	0.466	5.39E-06
HHDT-DSL	100.0	0.0089888	0.60	0.536	6.20E-06
Total	147.0			1.60E+00	1.86E-05

**EMFAC Running Diesel Exhaust Emissions
in units of grams/mile**

EMFAC2021

		Emission Factor (g/mi)			
		5 mph	10 mph	25 mph	35 mph
LHDT1	DSL	0.105	—	0.048	—
LHDT2	DSL	0.094	—	0.045	—
MHDT	DSL	0.041	—	0.010	—
HHDT	DSL	0.013	—	0.007	—

Idling Emissions for Trucks

Vehicle Class	Fuel	Vehicle Speed (mph)	DPM (grams/trip)
LHDT1	DSL	Idle	0.027326
LHDT2	DSL	Idle	0.027309
MHDT	DSL	Idle	0.024164
HHDT	DSL	Idle	0.029869

Off-site Truck Running Emissions for the Health Risk Screening Analysis—XX

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Nox_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
Riverside (SC)	2024	HHDT	Aggregate	5	Diesel	78.98900926	10.54786759	0.012505365	0.013070802	3185.826321	0.005961199	0.501928234	0.128342986	0.14610872	1.174959344	0.03016787
Riverside (SC)	2024	HHDT	Aggregate	10	Diesel	1775.474132	7.645351619	0.010723033	0.011207881	2728.832703	0.003540551	0.429928704	0.076227088	0.086778737	0.734996919	0.025840414
Riverside (SC)	2024	HHDT	Aggregate	15	Diesel	2255.26306	5.066894453	0.008649122	0.009040197	2242.361449	0.001807632	0.353284959	0.038917826	0.044304983	0.401484463	0.021233822
Riverside (SC)	2024	HHDT	Aggregate	20	Diesel	53817.37933	2.997351557	0.004672867	0.004884153	2041.2366	0.00095534	0.321597658	0.020568207	0.023415338	0.245742672	0.01932929
Riverside (SC)	2024	HHDT	Aggregate	25	Diesel	21381.31455	3.025655516	0.006449152	0.006740754	1788.115596	0.000839729	0.28171834	0.018079145	0.02058173	0.212529131	0.016932385
			Total			29.28303073	0.042999538	0.044943786	11986.37267	0.013104452	1.888457895	0.282135252	0.321189508	0.321189508	2.769712529	0.113503781
Riverside (SC)	2024	LHDT1	Aggregate	5	Diesel	34.70747808	2.467775192	0.100823649	0.105382447	1195.01218	0.021321877	0.188274656	0.459047451	0.522595003	1.474817225	0.011323348
Riverside (SC)	2024	LHDT1	Aggregate	10	Diesel	660.7517188	2.291214766	0.08237373	0.086098305	1035.333699	0.017445805	0.163117246	0.375597921	0.427593262	1.173914466	0.009810313
Riverside (SC)	2024	LHDT1	Aggregate	15	Diesel	676.8864444	2.138258962	0.067734068	0.070796702	869.0332848	0.014448831	0.136916548	0.311074831	0.354138013	0.94172775	0.008234532
Riverside (SC)	2024	LHDT1	Aggregate	20	Diesel	2319.232173	2.00813341	0.055847685	0.05837287	751.5480552	0.01204883	0.118406702	0.259404224	0.295314463	0.7570182	0.0071213
Riverside (SC)	2024	LHDT1	Aggregate	25	Diesel	13720.16123	1.905003012	0.046118652	0.048203933	653.3807717	0.01008674	0.102940407	0.217161571	0.24722401	0.607971135	0.006191115
			Total			10.81038534	0.352897784	0.368854256	4504.307991	0.075352084	0.709655558	1.622285997	1.846864751	4.955448776	0.042680607	
Riverside (SC)	2024	LHDT2	Aggregate	5	Diesel	15.73838616	2.250113866	0.090215048	0.094294172	1426.30061	0.018794267	0.224714242	0.404629497	0.460643781	1.284461336	0.013514923
Riverside (SC)	2024	LHDT2	Aggregate	10	Diesel	299.6232016	2.036428167	0.07496386	0.078353393	1243.279088	0.015754937	0.195879127	0.339194528	0.386150419	1.040985924	0.011780701
Riverside (SC)	2024	LHDT2	Aggregate	15	Diesel	306.9396232	1.848689392	0.062399734	0.065221173	1061.08179	0.013294091	0.167173868	0.286213959	0.325835564	0.843743483	0.010054289
Riverside (SC)	2024	LHDT2	Aggregate	20	Diesel	1051.674554	1.686326852	0.051901244	0.054247988	918.4009143	0.011245297	0.144694438	0.242104613	0.275620006	0.680553385	0.008702315
Riverside (SC)	2024	LHDT2	Aggregate	25	Diesel	6221.517884	1.552874648	0.043118026	0.045067631	797.8404445	0.009514718	0.125700087	0.204846274	0.233203864	0.544646951	0.007559944
			Total			9.374432925	0.322597912	0.337184358	5446.902846	0.06860331	0.858161762	1.476988871	1.681453633	4.394393079	0.051621173	
Riverside (SC)	2024	MHDT	Aggregate	5	Diesel	265.8486488	3.591084713	0.039173335	0.040944579	2418.261289	0.009512805	0.380998051	0.204808084	0.233158414	0.504491478	0.022899488
Riverside (SC)	2024	MHDT	Aggregate	10	Diesel	1046.951297	2.68323681	0.031327149	0.032743623	2004.231388	0.006465627	0.315767471	0.139203174	0.158472217	0.35747404	0.018978873
Riverside (SC)	2024	MHDT	Aggregate	15	Diesel	1518.897156	1.866832619	0.019983388	0.020886948	1576.960333	0.003223323	0.248450743	0.069397259	0.079003497	0.225820843	0.014932871
Riverside (SC)	2024	MHDT	Aggregate	20	Diesel	3664.345504	1.488228336	0.012914771	0.01349872	1343.260843	0.001593868	0.211631293	0.034315551	0.039065642	0.161666038	0.012719877
Riverside (SC)	2024	MHDT	Aggregate	25	Diesel	16808.58128	1.249040961	0.01000152	0.010453744	1211.38586	0.001139081	0.190854336	0.024524092	0.027918812	0.129284368	0.0114711
			Total			10.87842344	0.113400162	0.118527614	8554.099713	0.021934704	1.347701893	0.47224816	0.537618582	1.378736768	0.081002209	
Running Emissions 5-25 MPH Averaged							Nox_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
					HHDT	5.8566	0.0086	0.0090	2397.2745	0.0026	0.3777	0.0564	0.0642	0.5539	0.0227	
					LHDT1	2.1621	0.0706	0.0738	900.8616	0.0151	0.1419	0.3245	0.3694	0.9911	0.0085	
					LHDT2	1.8749	0.0645	0.0674	1089.3806	0.0137	0.1716	0.2954	0.3363	0.8789	0.0103	
					MHDT	2.1757	0.0227	0.0237	1710.8199	0.0044	0.2695	0.0944	0.1075	0.2757	0.0162	

Palmyrita Avenue Warehouse Project

Summary of Emissions in Pounds

Diesel Truck Idling Emissions

Segment - On-site Truck Idle	Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)	
On-site Idling – Location 1	2.083636585	0.004589508	1.675170382	0.000458951	Loading Docks Building 1
On-site Idling – Location 2	2.083636585	0.004589508	1.675170382	0.000458951	Loading Docks Building 2
On-site Idling – Location 3	4.167273169	0.009179016	3.350340764	0.000917902	Trailer Parking
Subtotal Idle	8.334546338	0.018358032	6.700681527		

Diesel Truck On-site Travel Emissions (5 mph)

Segment	Source ID	Source Group	Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)
On-site Truck Route 1	ONSITE1	ONSITE1	0.436559775	0.000961585	0.350978674	9.61585E-05
On-site Truck Route 2	ONSITE2	ONSITE2	0.732892028	0.0016143	0.589219362	0.00016143
	Subtotal On-site Travel		1.169451803	0.002575885	0.940198036	

Diesel Truck Localized Off-site Travel Emissions (5-25 mph aggregated)

Segment	Source ID	Source Group	Emissions (g/day)	Emissions (lb/day)	Emissions (lb/year)	Max Emissions in an Hour (lbs/hr)
Off-site Truck Route 1	SLINE5	Off1	1.60302385	0.00353089	1.288774681	0.000588482
	Subtotal Off-site Travel		1.60302385	0.00353089	1.288774681	

Notes: Divided pounds per day by 10 hours to estimate maximum pounds in an hour.

Health Risk Summary (Summary of HARP2 Results)

Palmyrita Avenue Warehouse Project

		Cancer	MAXHI	MAXHI
	RISK_SUM	Risk/million	NonCancer Chronic	Acute
Maximum Risk	4.979E-07	0.4979	1.13E-04	0.00E+00
	X	Y		
MER UTM	469184.28	3763161.46		
Receptor # 4				
MER = Maximally Exposed Receptor				

*HARP - HRACalc v22118 11/3/2022 4:41:54 PM - Cancer Risk - Input File: F:\BACKUP\4996.00017 Palmyrita\02 - V2\HARP\PALMYRITA\hra\PalmyritaHRAInput.hra

*HARP - HRACalc v22118 11/3/2022 4:41:54 PM - Chronic Risk - Input File: F:\BACKUP\4996.00017 Palmyrita\02 - V2\HARP\PALMYRITA\hra\PalmyritaHRAInput.hra

*HARP - HRACalc v22118 11/3/2022 4:41:54 PM - Acute Risk - Input File: F:\BACKUP\4996.00017 Palmyrita\02 - V2\HARP\PALMYRITA\hra\PalmyritaHRAInput.hra

REC	GRP	X	Y	RISK_SUM	SCENARIO	MAXHI NonCancerChronic	MAXHI Acute
1	ALL	469181.21	3763171.19	4.790E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.08E-04	0.00E+00
2	ALL	469180.43	3763187.66	4.472E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.01E-04	0.00E+00
3	ALL	469197.68	3763200.2	4.164E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.42E-05	0.00E+00
4	ALL	469184.28	3763161.46	4.979E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.13E-04	0.00E+00
5	ALL	469202.62	3763178.61	4.494E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.02E-04	0.00E+00
6	ALL	469202.6	3763160.03	4.868E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.10E-04	0.00E+00
7	ALL	469230.58	3763154.76	4.693E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-04	0.00E+00
8	ALL	469254.37	3763155.85	4.457E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.01E-04	0.00E+00
9	ALL	469249.28	3763174.92	4.209E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.52E-05	0.00E+00
10	ALL	469276.89	3763154.04	4.296E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.72E-05	0.00E+00
11	ALL	469289.79	3763155.67	4.159E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.41E-05	0.00E+00
12	ALL	469289.97	3763168.75	4.025E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.10E-05	0.00E+00
13	ALL	469332.34	3763167.95	3.742E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	8.46E-05	0.00E+00
14	ALL	469211.85	3763343.48	2.508E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.67E-05	0.00E+00
15	ALL	469185.38	3763375.01	2.323E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.26E-05	0.00E+00
16	ALL	469191.26	3763390.14	2.184E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.94E-05	0.00E+00
17	ALL	469207.65	3763367.44	2.290E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.18E-05	0.00E+00
18	ALL	469194.2	3763420.4	1.980E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.48E-05	0.00E+00
19	ALL	469268.17	3763313.64	2.589E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.86E-05	0.00E+00
20	ALL	469248.42	3763343.48	2.362E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.34E-05	0.00E+00
21	ALL	469252.62	3763357.77	2.241E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.07E-05	0.00E+00
22	ALL	469192.05	3763403.32	2.089E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.73E-05	0.00E+00
23	ALL	468258.4	3762314.78	2.664E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.02E-05	0.00E+00
24	ALL	468245.93	3761977.99	1.256E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.84E-05	0.00E+00
25	ALL	468580.64	3761973.83	1.146E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.59E-05	0.00E+00
26	ALL	468593.11	3761971.75	1.137E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.57E-05	0.00E+00
27	ALL	468595.19	3762316.86	3.255E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.36E-05	0.00E+00
28	ALL	468260.48	3762323.1	2.716E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.14E-05	0.00E+00
29	ALL	468258.22	3762309.83	2.636E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.96E-05	0.00E+00
30	ALL	468258.03	3762304.87	2.608E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.90E-05	0.00E+00
31	ALL	468257.85	3762299.92	2.581E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.84E-05	0.00E+00
32	ALL	468257.67	3762294.97	2.553E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.77E-05	0.00E+00
33	ALL	468257.48	3762290.02	2.526E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.71E-05	0.00E+00
34	ALL	468257.3	3762285.06	2.498E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.65E-05	0.00E+00
35	ALL	468257.12	3762280.11	2.470E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.59E-05	0.00E+00
36	ALL	468256.93	3762275.16	2.441E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.52E-05	0.00E+00
37	ALL	468256.75	3762270.21	2.413E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.46E-05	0.00E+00
38	ALL	468256.57	3762265.25	2.385E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.39E-05	0.00E+00
39	ALL	468256.38	3762260.3	2.357E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.33E-05	0.00E+00
40	ALL	468256.2	3762255.35	2.329E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.27E-05	0.00E+00
41	ALL	468256.02	3762250.39	2.303E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.21E-05	0.00E+00
42	ALL	468255.83	3762245.44	2.277E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.15E-05	0.00E+00
43	ALL	468255.65	3762240.49	2.251E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.09E-05	0.00E+00
44	ALL	468255.47	3762235.54	2.226E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.03E-05	0.00E+00
45	ALL	468255.28	3762230.58	2.200E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.98E-05	0.00E+00
46	ALL	468255.1	3762225.63	2.175E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.92E-05	0.00E+00
47	ALL	468254.92	3762220.68	2.151E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.86E-05	0.00E+00
48	ALL	468254.73	3762215.72	2.126E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.81E-05	0.00E+00
49	ALL	468254.55	3762210.77	2.102E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.75E-05	0.00E+00
50	ALL	468254.37	3762205.82	2.078E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.70E-05	0.00E+00
51	ALL	468254.18	3762200.87	2.055E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.65E-05	0.00E+00

HARP2 - HRACalc (dated 22118) 11/3/2022 4:41:54 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True

Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaCancerRisk.csv

Cancer risk total by receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaCancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaNCChronicRisk.csv

Chronic risk total by receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaNCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaNCAcuteRisk.csv

Acute risk total by receptor saved to: F:\BACKUP\4996.00017 Palmyrita\02 -
V2\HARP\PALMYRITA\hra\PalmyritaNCAcuteRiskSumByRec.csv

HRA ran successfully

* AERMOD (22112): C:\Project\Riverside Palmyrita Avenue Warehouse 4996.0017\AERMOD\Pal 11/03/22
 * AERMET (16216): 14:06:08
 * MODELING OPTIONS USED: RegDFAULT CONC ELEV FLGPOL URBAN ADJ_U*
 * PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ALL
 * FOR A TOTAL OF 592 RECEPTORS.
 * FORMAT: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
469181.21000	3763171.19000	23.58034	293.00	877.00	0.00	ANNUAL	ALL	00000005	
469180.43000	3763187.66000	22.23865	292.93	877.00	0.00	ANNUAL	ALL	00000005	
469197.68000	3763200.20000	20.83173	292.64	877.00	0.00	ANNUAL	ALL	00000005	
469184.28000	3763161.46000	24.35742	293.00	877.00	0.00	ANNUAL	ALL	00000005	
469202.62000	3763178.61000	22.18397	293.00	877.00	0.00	ANNUAL	ALL	00000005	
469202.60000	3763160.03000	23.77244	293.00	877.00	0.00	ANNUAL	ALL	00000005	
469230.58000	3763154.76000	22.80864	293.70	877.00	0.00	ANNUAL	ALL	00000005	
469254.37000	3763155.85000	21.69866	294.00	877.00	0.00	ANNUAL	ALL	00000005	
469249.28000	3763174.92000	20.73265	293.19	877.00	0.00	ANNUAL	ALL	00000005	
469276.89000	3763154.04000	20.96021	294.02	877.00	0.00	ANNUAL	ALL	00000005	
469289.79000	3763155.67000	20.35440	294.02	914.00	0.00	ANNUAL	ALL	00000005	
469289.97000	3763168.75000	19.90041	292.63	914.00	0.00	ANNUAL	ALL	00000005	
469332.34000	3763167.95000	18.66184	292.07	914.00	0.00	ANNUAL	ALL	00000005	
469211.85000	3763343.48000	13.18551	291.58	877.00	0.00	ANNUAL	ALL	00000005	
469185.38000	3763375.01000	12.32145	291.61	877.00	0.00	ANNUAL	ALL	00000005	
469191.26000	3763390.14000	11.58887	292.26	866.00	0.00	ANNUAL	ALL	00000005	
469207.65000	3763367.44000	12.06728	292.87	877.00	0.00	ANNUAL	ALL	00000005	
469194.20000	3763420.40000	10.54017	292.49	866.00	0.00	ANNUAL	ALL	00000005	
469268.17000	3763313.64000	13.47787	291.33	877.00	0.00	ANNUAL	ALL	00000005	
469248.42000	3763343.48000	12.33494	293.07	877.00	0.00	ANNUAL	ALL	00000005	
469252.62000	3763357.77000	11.73096	293.31	877.00	0.00	ANNUAL	ALL	00000005	
469192.05000	3763403.32000	11.10231	292.42	866.00	0.00	ANNUAL	ALL	00000005	
468258.40000	3762314.78000	17.76075	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468245.93000	3761977.99000	7.83414	276.25	914.00	0.00	ANNUAL	ALL	00000005	
468580.64000	3761973.83000	6.84841	280.04	914.00	0.00	ANNUAL	ALL	00000005	
468593.11000	3761971.75000	6.78532	280.45	914.00	0.00	ANNUAL	ALL	00000005	
468595.19000	3762316.86000	20.19392	279.52	914.00	0.00	ANNUAL	ALL	00000005	
468260.48000	3762323.10000	18.14178	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468258.22000	3762309.83000	17.55282	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468258.03000	3762304.87000	17.34573	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468257.85000	3762299.92000	17.14062	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468257.67000	3762294.97000	16.93698	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468257.48000	3762290.02000	16.73472	275.00	914.00	0.00	ANNUAL	ALL	00000005	
468257.30000	3762285.06000	16.53050	274.96	914.00	0.00	ANNUAL	ALL	00000005	
468257.12000	3762280.11000	16.32195	274.84	914.00	0.00	ANNUAL	ALL	00000005	
468256.93000	3762275.16000	16.11440	274.71	914.00	0.00	ANNUAL	ALL	00000005	
468256.75000	3762270.21000	15.90971	274.59	914.00	0.00	ANNUAL	ALL	00000005	
468256.57000	3762265.25000	15.70584	274.46	914.00	0.00	ANNUAL	ALL	00000005	
468256.38000	3762260.30000	15.50353	274.32	914.00	0.00	ANNUAL	ALL	00000005	
468256.20000	3762255.35000	15.30572	274.21	914.00	0.00	ANNUAL	ALL	00000005	
468256.02000	3762250.39000	15.11494	274.17	914.00	0.00	ANNUAL	ALL	00000005	
468255.83000	3762245.44000	14.92643	274.13	914.00	0.00	ANNUAL	ALL	00000005	
468255.65000	3762240.49000	14.73997	274.09	914.00	0.00	ANNUAL	ALL	00000005	
468255.47000	3762235.54000	14.55624	274.06	914.00	0.00	ANNUAL	ALL	00000005	
468255.28000	3762230.58000	14.37409	274.03	914.00	0.00	ANNUAL	ALL	00000005	
468255.10000	3762225.63000	14.19438	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.92000	3762220.68000	14.01879	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.73000	3762215.72000	13.84478	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.55000	3762210.77000	13.67317	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.37000	3762205.82000	13.50357	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.18000	3762200.87000	13.33595	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468254.00000	3762195.91000	13.17007	274.00	914.00	0.00	ANNUAL	ALL	00000005	
468253.82000	3762190.96000	13.00841	274.03	914.00	0.00	ANNUAL	ALL	00000005	
468253.63000	3762186.01000	12.84810	274.05	914.00	0.00	ANNUAL	ALL	00000005	
468253.45000	3762181.06000	12.68981	274.07	914.00	0.00	ANNUAL	ALL	00000005	
468253.27000	3762176.10000	12.53262	274.08	914.00	0.00	ANNUAL	ALL	00000005	
468253.08000	3762171.15000	12.37834	274.10	914.00	0.00	ANNUAL	ALL	00000005	
468252.90000	3762166.20000	12.22552	274.11	914.00	0.00	ANNUAL	ALL	00000005	
468252.72000	3762161.24000	12.07389	274.11	914.00	0.00	ANNUAL	ALL	00000005	
468252.53000	3762156.29000	11.92405	274.10	914.00	0.00	ANNUAL	ALL	00000005	
468252.35000	3762151.34000	11.77627	274.09	914.00	0.00	ANNUAL	ALL	00000005	
468252.16000	3762146.38000	11.63075	274.09	914.00	0.00	ANNUAL	ALL	00000005	
468251.98000	3762141.43000	11.48705	274.08	914.00	0.00	ANNUAL	ALL	00000005	

468251.80000	3762136.48000	11.34587	274.08	914.00	0.00	ANNUAL	ALL	00000005
468251.61000	3762131.53000	11.21397	274.23	914.00	0.00	ANNUAL	ALL	00000005
468251.43000	3762126.57000	11.08341	274.38	914.00	0.00	ANNUAL	ALL	00000005
468251.25000	3762121.62000	10.95477	274.53	914.00	0.00	ANNUAL	ALL	00000005
468251.06000	3762116.67000	10.82776	274.68	914.00	0.00	ANNUAL	ALL	00000005
468250.88000	3762111.71000	10.70253	274.84	914.00	0.00	ANNUAL	ALL	00000005
468250.70000	3762106.76000	10.57875	274.99	914.00	0.00	ANNUAL	ALL	00000005
468250.51000	3762101.81000	10.45131	275.01	914.00	0.00	ANNUAL	ALL	00000005
468250.33000	3762096.86000	10.32493	275.01	914.00	0.00	ANNUAL	ALL	00000005
468250.15000	3762091.90000	10.20018	275.01	914.00	0.00	ANNUAL	ALL	00000005
468249.96000	3762086.95000	10.07755	275.01	914.00	0.00	ANNUAL	ALL	00000005
468249.78000	3762082.00000	9.95675	275.01	914.00	0.00	ANNUAL	ALL	00000005
468249.60000	3762077.05000	9.83738	275.00	914.00	0.00	ANNUAL	ALL	00000005
468249.41000	3762072.09000	9.72542	275.15	914.00	0.00	ANNUAL	ALL	00000005
468249.23000	3762067.14000	9.61553	275.31	914.00	0.00	ANNUAL	ALL	00000005
468249.05000	3762062.19000	9.50712	275.47	914.00	0.00	ANNUAL	ALL	00000005
468248.86000	3762057.23000	9.39997	275.63	914.00	0.00	ANNUAL	ALL	00000005
468248.68000	3762052.28000	9.29448	275.79	914.00	0.00	ANNUAL	ALL	00000005
468248.50000	3762047.33000	9.19011	275.94	914.00	0.00	ANNUAL	ALL	00000005
468248.31000	3762042.38000	9.08331	275.96	914.00	0.00	ANNUAL	ALL	00000005
468248.13000	3762037.42000	8.97701	275.95	914.00	0.00	ANNUAL	ALL	00000005
468247.95000	3762032.47000	8.87284	275.95	914.00	0.00	ANNUAL	ALL	00000005
468247.76000	3762027.52000	8.77000	275.94	914.00	0.00	ANNUAL	ALL	00000005
468247.58000	3762022.56000	8.66853	275.93	914.00	0.00	ANNUAL	ALL	00000005
468247.40000	3762017.61000	8.56911	275.93	914.00	0.00	ANNUAL	ALL	00000005
468247.21000	3762012.66000	8.47124	275.93	914.00	0.00	ANNUAL	ALL	00000005
468247.03000	3762007.71000	8.37512	275.94	914.00	0.00	ANNUAL	ALL	00000005
468246.85000	3762002.75000	8.28027	275.95	914.00	0.00	ANNUAL	ALL	00000005
468246.66000	3761997.80000	8.18708	275.96	914.00	0.00	ANNUAL	ALL	00000005
468246.48000	3761992.85000	8.09556	275.98	914.00	0.00	ANNUAL	ALL	00000005
468246.30000	3761987.90000	8.00545	276.00	914.00	0.00	ANNUAL	ALL	00000005
468246.11000	3761982.94000	7.91874	276.11	914.00	0.00	ANNUAL	ALL	00000005
468250.93000	3761977.93000	7.82288	276.32	914.00	0.00	ANNUAL	ALL	00000005
468255.92000	3761977.87000	7.81255	276.44	914.00	0.00	ANNUAL	ALL	00000005
468260.92000	3761977.80000	7.80177	276.56	914.00	0.00	ANNUAL	ALL	00000005
468265.91000	3761977.74000	7.79093	276.68	914.00	0.00	ANNUAL	ALL	00000005
468270.91000	3761977.68000	7.77983	276.80	914.00	0.00	ANNUAL	ALL	00000005
468275.90000	3761977.62000	7.76830	276.91	914.00	0.00	ANNUAL	ALL	00000005
468280.90000	3761977.56000	7.75630	277.01	914.00	0.00	ANNUAL	ALL	00000005
468285.90000	3761977.49000	7.74281	277.06	914.00	0.00	ANNUAL	ALL	00000005
468290.89000	3761977.43000	7.72956	277.12	914.00	0.00	ANNUAL	ALL	00000005
468295.89000	3761977.37000	7.71589	277.17	914.00	0.00	ANNUAL	ALL	00000005
468300.88000	3761977.31000	7.70209	277.22	914.00	0.00	ANNUAL	ALL	00000005
468305.88000	3761977.25000	7.68810	277.27	914.00	0.00	ANNUAL	ALL	00000005
468310.87000	3761977.18000	7.67422	277.34	914.00	0.00	ANNUAL	ALL	00000005
468315.87000	3761977.12000	7.66140	277.46	914.00	0.00	ANNUAL	ALL	00000005
468320.87000	3761977.06000	7.64821	277.57	914.00	0.00	ANNUAL	ALL	00000005
468325.86000	3761977.00000	7.63511	277.69	914.00	0.00	ANNUAL	ALL	00000005
468330.86000	3761976.93000	7.62146	277.80	914.00	0.00	ANNUAL	ALL	00000005
468335.85000	3761976.87000	7.60809	277.92	914.00	0.00	ANNUAL	ALL	00000005
468340.85000	3761976.81000	7.59396	278.01	914.00	0.00	ANNUAL	ALL	00000005
468345.84000	3761976.75000	7.57917	278.07	914.00	0.00	ANNUAL	ALL	00000005
468350.84000	3761976.69000	7.56407	278.12	914.00	0.00	ANNUAL	ALL	00000005
468355.83000	3761976.62000	7.54894	278.18	914.00	0.00	ANNUAL	ALL	00000005
468360.83000	3761976.56000	7.53388	278.24	914.00	0.00	ANNUAL	ALL	00000005
468365.83000	3761976.50000	7.51857	278.29	914.00	0.00	ANNUAL	ALL	00000005
468370.82000	3761976.44000	7.50380	278.37	914.00	0.00	ANNUAL	ALL	00000005
468375.82000	3761976.38000	7.48949	278.48	914.00	0.00	ANNUAL	ALL	00000005
468380.81000	3761976.31000	7.47498	278.59	914.00	0.00	ANNUAL	ALL	00000005
468385.81000	3761976.25000	7.46056	278.70	914.00	0.00	ANNUAL	ALL	00000005
468390.80000	3761976.19000	7.44612	278.81	914.00	0.00	ANNUAL	ALL	00000005
468395.80000	3761976.13000	7.43158	278.92	914.00	0.00	ANNUAL	ALL	00000005
468400.80000	3761976.06000	7.41648	279.01	914.00	0.00	ANNUAL	ALL	00000005
468405.79000	3761976.00000	7.40105	279.07	914.00	0.00	ANNUAL	ALL	00000005
468410.79000	3761975.94000	7.38557	279.13	914.00	0.00	ANNUAL	ALL	00000005
468415.78000	3761975.88000	7.37011	279.19	914.00	0.00	ANNUAL	ALL	00000005
468420.78000	3761975.82000	7.35461	279.25	914.00	0.00	ANNUAL	ALL	00000005
468425.77000	3761975.75000	7.33913	279.32	914.00	0.00	ANNUAL	ALL	00000005
468430.77000	3761975.69000	7.32379	279.39	914.00	0.00	ANNUAL	ALL	00000005
468435.77000	3761975.63000	7.30910	279.50	914.00	0.00	ANNUAL	ALL	00000005
468440.76000	3761975.57000	7.29426	279.60	914.00	0.00	ANNUAL	ALL	00000005
468445.76000	3761975.51000	7.27953	279.71	914.00	0.00	ANNUAL	ALL	00000005
468450.75000	3761975.44000	7.26465	279.82	914.00	0.00	ANNUAL	ALL	00000005

468455.75000	3761975.38000	7.24975	279.92	914.00	0.00	ANNUAL	ALL	00000005
468460.74000	3761975.32000	7.23471	280.01	914.00	0.00	ANNUAL	ALL	00000005
468465.74000	3761975.26000	7.21927	280.08	914.00	0.00	ANNUAL	ALL	00000005
468470.74000	3761975.20000	7.20370	280.14	914.00	0.00	ANNUAL	ALL	00000005
468475.73000	3761975.13000	7.18814	280.21	914.00	0.00	ANNUAL	ALL	00000005
468480.73000	3761975.07000	7.17259	280.27	914.00	0.00	ANNUAL	ALL	00000005
468485.72000	3761975.01000	7.15722	280.34	914.00	0.00	ANNUAL	ALL	00000005
468490.72000	3761974.95000	7.14133	280.37	914.00	0.00	ANNUAL	ALL	00000005
468495.71000	3761974.89000	7.12436	280.31	914.00	0.00	ANNUAL	ALL	00000005
468500.71000	3761974.82000	7.10722	280.25	914.00	0.00	ANNUAL	ALL	00000005
468505.70000	3761974.76000	7.09014	280.18	914.00	0.00	ANNUAL	ALL	00000005
468510.70000	3761974.70000	7.07318	280.12	914.00	0.00	ANNUAL	ALL	00000005
468515.70000	3761974.64000	7.05610	280.05	914.00	0.00	ANNUAL	ALL	00000005
468520.69000	3761974.58000	7.03933	280.00	914.00	0.00	ANNUAL	ALL	00000005
468525.69000	3761974.51000	7.02307	280.00	914.00	0.00	ANNUAL	ALL	00000005
468530.68000	3761974.45000	7.00703	280.00	914.00	0.00	ANNUAL	ALL	00000005
468535.68000	3761974.39000	6.99098	280.00	914.00	0.00	ANNUAL	ALL	00000005
468540.67000	3761974.33000	6.97500	280.00	914.00	0.00	ANNUAL	ALL	00000005
468545.67000	3761974.27000	6.95901	280.00	914.00	0.00	ANNUAL	ALL	00000005
468550.67000	3761974.20000	6.94290	280.00	914.00	0.00	ANNUAL	ALL	00000005
468555.66000	3761974.14000	6.92701	280.00	914.00	0.00	ANNUAL	ALL	00000005
468560.66000	3761974.08000	6.91112	280.00	914.00	0.00	ANNUAL	ALL	00000005
468565.65000	3761974.02000	6.89530	280.00	914.00	0.00	ANNUAL	ALL	00000005
468570.65000	3761973.95000	6.87934	280.00	914.00	0.00	ANNUAL	ALL	00000005
468575.64000	3761973.89000	6.86360	280.00	914.00	0.00	ANNUAL	ALL	00000005
468584.80000	3761973.14000	6.82740	280.18	914.00	0.00	ANNUAL	ALL	00000005
468588.95000	3761972.44000	6.80620	280.31	914.00	0.00	ANNUAL	ALL	00000005
468593.14000	3761976.68000	6.86064	280.45	914.00	0.00	ANNUAL	ALL	00000005
468593.17000	3761981.61000	6.93736	280.45	914.00	0.00	ANNUAL	ALL	00000005
468593.20000	3761986.54000	7.01562	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.23000	3761991.47000	7.09523	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.26000	3761996.40000	7.17633	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.29000	3762001.33000	7.25896	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.32000	3762006.26000	7.34317	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.35000	3762011.19000	7.42900	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.38000	3762016.12000	7.51650	280.46	914.00	0.00	ANNUAL	ALL	00000005
468593.41000	3762021.05000	7.60681	280.54	914.00	0.00	ANNUAL	ALL	00000005
468593.44000	3762025.98000	7.69899	280.63	914.00	0.00	ANNUAL	ALL	00000005
468593.47000	3762030.91000	7.79299	280.72	914.00	0.00	ANNUAL	ALL	00000005
468593.50000	3762035.84000	7.88883	280.81	914.00	0.00	ANNUAL	ALL	00000005
468593.53000	3762040.77000	7.98660	280.90	914.00	0.00	ANNUAL	ALL	00000005
468593.56000	3762045.70000	8.08622	280.98	914.00	0.00	ANNUAL	ALL	00000005
468593.59000	3762050.63000	8.18709	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.62000	3762055.56000	8.28978	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.64000	3762060.49000	8.39464	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.67000	3762065.42000	8.50165	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.70000	3762070.35000	8.61092	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.73000	3762075.28000	8.72252	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.76000	3762080.21000	8.83651	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.79000	3762085.14000	8.95298	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.82000	3762090.07000	9.07198	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.85000	3762095.00000	9.19360	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.88000	3762099.93000	9.31793	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.91000	3762104.86000	9.44505	281.00	914.00	0.00	ANNUAL	ALL	00000005
468593.94000	3762109.79000	9.57325	280.89	914.00	0.00	ANNUAL	ALL	00000005
468593.97000	3762114.72000	9.70345	280.73	914.00	0.00	ANNUAL	ALL	00000005
468594.00000	3762119.65000	9.83627	280.56	914.00	0.00	ANNUAL	ALL	00000005
468594.03000	3762124.58000	9.97202	280.40	914.00	0.00	ANNUAL	ALL	00000005
468594.06000	3762129.52000	10.11074	280.23	914.00	0.00	ANNUAL	ALL	00000005
468594.09000	3762134.44000	10.25213	280.07	914.00	0.00	ANNUAL	ALL	00000005
468594.12000	3762139.38000	10.39820	279.95	914.00	0.00	ANNUAL	ALL	00000005
468594.15000	3762144.31000	10.54836	279.87	914.00	0.00	ANNUAL	ALL	00000005
468594.18000	3762149.23000	10.70150	279.78	914.00	0.00	ANNUAL	ALL	00000005
468594.21000	3762154.17000	10.85931	279.70	914.00	0.00	ANNUAL	ALL	00000005
468594.24000	3762159.10000	11.02065	279.62	914.00	0.00	ANNUAL	ALL	00000005
468594.27000	3762164.03000	11.18565	279.53	914.00	0.00	ANNUAL	ALL	00000005
468594.30000	3762168.96000	11.35660	279.49	914.00	0.00	ANNUAL	ALL	00000005
468594.33000	3762173.89000	11.53345	279.49	914.00	0.00	ANNUAL	ALL	00000005
468594.36000	3762178.82000	11.71497	279.49	914.00	0.00	ANNUAL	ALL	00000005
468594.39000	3762183.75000	11.90137	279.49	914.00	0.00	ANNUAL	ALL	00000005
468594.42000	3762188.68000	12.09323	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.45000	3762193.61000	12.28999	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.48000	3762198.54000	12.49226	279.50	914.00	0.00	ANNUAL	ALL	00000005

468594.51000	3762203.47000	12.70030	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.54000	3762208.40000	12.91437	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.57000	3762213.33000	13.13475	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.60000	3762218.26000	13.36176	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.63000	3762223.19000	13.59573	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.66000	3762228.12000	13.83701	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.68000	3762233.05000	14.08610	279.50	914.00	0.00	ANNUAL	ALL	00000005
468594.71000	3762237.98000	14.34377	279.51	914.00	0.00	ANNUAL	ALL	00000005
468594.74000	3762242.91000	14.60954	279.51	914.00	0.00	ANNUAL	ALL	00000005
468594.77000	3762247.84000	14.88445	279.51	914.00	0.00	ANNUAL	ALL	00000005
468594.80000	3762252.77000	15.16906	279.51	914.00	0.00	ANNUAL	ALL	00000005
468594.83000	3762257.70000	15.46520	279.53	914.00	0.00	ANNUAL	ALL	00000005
468594.86000	3762262.63000	15.77618	279.61	914.00	0.00	ANNUAL	ALL	00000005
468594.89000	3762267.56000	16.09928	279.69	914.00	0.00	ANNUAL	ALL	00000005
468594.92000	3762272.49000	16.43540	279.77	914.00	0.00	ANNUAL	ALL	00000005
468594.95000	3762277.42000	16.78559	279.85	914.00	0.00	ANNUAL	ALL	00000005
468594.98000	3762282.35000	17.15102	279.93	914.00	0.00	ANNUAL	ALL	00000005
468595.01000	3762287.28000	17.53170	279.99	914.00	0.00	ANNUAL	ALL	00000005
468595.04000	3762292.21000	17.92050	279.91	914.00	0.00	ANNUAL	ALL	00000005
468595.07000	3762297.14000	18.32822	279.83	914.00	0.00	ANNUAL	ALL	00000005
468595.10000	3762302.07000	18.75681	279.75	914.00	0.00	ANNUAL	ALL	00000005
468595.13000	3762307.00000	19.20856	279.67	914.00	0.00	ANNUAL	ALL	00000005
468595.16000	3762311.93000	19.68618	279.59	914.00	0.00	ANNUAL	ALL	00000005
468590.19000	3762316.95000	20.26813	279.35	914.00	0.00	ANNUAL	ALL	00000005
468585.20000	3762317.05000	20.34217	279.19	914.00	0.00	ANNUAL	ALL	00000005
468580.20000	3762317.14000	20.41150	279.02	914.00	0.00	ANNUAL	ALL	00000005
468575.21000	3762317.23000	20.49561	279.00	914.00	0.00	ANNUAL	ALL	00000005
468570.21000	3762317.33000	20.58018	279.00	914.00	0.00	ANNUAL	ALL	00000005
468565.22000	3762317.42000	20.65955	279.00	914.00	0.00	ANNUAL	ALL	00000005
468560.22000	3762317.51000	20.73431	279.00	914.00	0.00	ANNUAL	ALL	00000005
468555.22000	3762317.60000	20.80365	279.00	914.00	0.00	ANNUAL	ALL	00000005
468550.23000	3762317.70000	20.86798	279.00	914.00	0.00	ANNUAL	ALL	00000005
468545.23000	3762317.79000	20.90813	278.86	914.00	0.00	ANNUAL	ALL	00000005
468540.24000	3762317.88000	20.93742	278.69	914.00	0.00	ANNUAL	ALL	00000005
468535.24000	3762317.98000	20.96059	278.52	914.00	0.00	ANNUAL	ALL	00000005
468530.25000	3762318.07000	20.97661	278.36	914.00	0.00	ANNUAL	ALL	00000005
468525.25000	3762318.16000	20.98429	278.19	914.00	0.00	ANNUAL	ALL	00000005
468520.25000	3762318.26000	20.98613	278.02	914.00	0.00	ANNUAL	ALL	00000005
468515.26000	3762318.35000	20.98303	277.87	914.00	0.00	ANNUAL	ALL	00000005
468510.26000	3762318.44000	20.97239	277.71	914.00	0.00	ANNUAL	ALL	00000005
468505.27000	3762318.54000	20.95832	277.56	914.00	0.00	ANNUAL	ALL	00000005
468500.27000	3762318.63000	20.93643	277.40	914.00	0.00	ANNUAL	ALL	00000005
468495.28000	3762318.72000	20.91094	277.25	914.00	0.00	ANNUAL	ALL	00000005
468490.28000	3762318.82000	20.88172	277.10	914.00	0.00	ANNUAL	ALL	00000005
468485.29000	3762318.91000	20.84594	276.94	914.00	0.00	ANNUAL	ALL	00000005
468480.29000	3762319.00000	20.80481	276.77	914.00	0.00	ANNUAL	ALL	00000005
468475.29000	3762319.10000	20.76240	276.61	914.00	0.00	ANNUAL	ALL	00000005
468470.30000	3762319.19000	20.71592	276.45	914.00	0.00	ANNUAL	ALL	00000005
468465.30000	3762319.28000	20.66500	276.28	914.00	0.00	ANNUAL	ALL	00000005
468460.31000	3762319.38000	20.61371	276.12	914.00	0.00	ANNUAL	ALL	00000005
468455.31000	3762319.47000	20.55905	275.96	914.00	0.00	ANNUAL	ALL	00000005
468450.32000	3762319.56000	20.50085	275.79	914.00	0.00	ANNUAL	ALL	00000005
468445.32000	3762319.65000	20.44193	275.63	914.00	0.00	ANNUAL	ALL	00000005
468440.32000	3762319.75000	20.38194	275.47	914.00	0.00	ANNUAL	ALL	00000005
468435.33000	3762319.84000	20.31814	275.30	914.00	0.00	ANNUAL	ALL	00000005
468430.33000	3762319.93000	20.25410	275.14	914.00	0.00	ANNUAL	ALL	00000005
468425.34000	3762320.03000	20.20908	275.12	914.00	0.00	ANNUAL	ALL	00000005
468420.34000	3762320.12000	20.16437	275.12	914.00	0.00	ANNUAL	ALL	00000005
468415.35000	3762320.21000	20.11819	275.12	914.00	0.00	ANNUAL	ALL	00000005
468410.35000	3762320.31000	20.07245	275.13	914.00	0.00	ANNUAL	ALL	00000005
468405.35000	3762320.40000	20.02325	275.13	914.00	0.00	ANNUAL	ALL	00000005
468400.36000	3762320.49000	19.97280	275.13	914.00	0.00	ANNUAL	ALL	00000005
468395.36000	3762320.58000	19.93635	275.25	914.00	0.00	ANNUAL	ALL	00000005
468390.37000	3762320.68000	19.90263	275.40	914.00	0.00	ANNUAL	ALL	00000005
468385.37000	3762320.77000	19.86625	275.55	914.00	0.00	ANNUAL	ALL	00000005
468380.38000	3762320.87000	19.82761	275.69	914.00	0.00	ANNUAL	ALL	00000005
468375.38000	3762320.96000	19.78649	275.83	914.00	0.00	ANNUAL	ALL	00000005
468370.38000	3762321.05000	19.74480	275.98	914.00	0.00	ANNUAL	ALL	00000005
468365.39000	3762321.14000	19.68731	276.00	914.00	0.00	ANNUAL	ALL	00000005
468360.39000	3762321.24000	19.62704	276.00	914.00	0.00	ANNUAL	ALL	00000005
468355.40000	3762321.33000	19.56534	276.00	914.00	0.00	ANNUAL	ALL	00000005
468350.40000	3762321.42000	19.50255	276.00	914.00	0.00	ANNUAL	ALL	00000005
468345.41000	3762321.52000	19.43952	276.00	914.00	0.00	ANNUAL	ALL	00000005

468340.41000	3762321.61000	19.37490	276.00	914.00	0.00	ANNUAL	ALL	00000005
468335.42000	3762321.70000	19.29505	275.86	914.00	0.00	ANNUAL	ALL	00000005
468330.42000	3762321.80000	19.21281	275.70	914.00	0.00	ANNUAL	ALL	00000005
468325.42000	3762321.89000	19.12826	275.53	914.00	0.00	ANNUAL	ALL	00000005
468320.43000	3762321.98000	19.04314	275.36	914.00	0.00	ANNUAL	ALL	00000005
468315.43000	3762322.08000	18.95876	275.20	914.00	0.00	ANNUAL	ALL	00000005
468310.44000	3762322.17000	18.87230	275.03	914.00	0.00	ANNUAL	ALL	00000005
468305.44000	3762322.26000	18.79972	275.00	914.00	0.00	ANNUAL	ALL	00000005
468300.45000	3762322.35000	18.72964	275.00	914.00	0.00	ANNUAL	ALL	00000005
468295.45000	3762322.45000	18.65907	275.00	914.00	0.00	ANNUAL	ALL	00000005
468290.45000	3762322.54000	18.58722	275.00	914.00	0.00	ANNUAL	ALL	00000005
468285.46000	3762322.63000	18.51475	275.00	914.00	0.00	ANNUAL	ALL	00000005
468280.46000	3762322.73000	18.44182	275.00	914.00	0.00	ANNUAL	ALL	00000005
468275.47000	3762322.82000	18.36786	275.00	914.00	0.00	ANNUAL	ALL	00000005
468270.47000	3762322.91000	18.29302	275.00	914.00	0.00	ANNUAL	ALL	00000005
468265.48000	3762323.01000	18.21805	275.00	914.00	0.00	ANNUAL	ALL	00000005
468259.44000	3762318.94000	17.95031	275.00	914.00	0.00	ANNUAL	ALL	00000005
469861.62000	3763923.36000	2.49162	302.85	866.00	0.00	ANNUAL	ALL	00000005
469858.61000	3763691.98000	3.12641	304.10	877.00	0.00	ANNUAL	ALL	00000005
469983.32000	3763688.97000	2.74305	307.79	877.00	0.00	ANNUAL	ALL	00000005
470038.91000	3763688.97000	2.58672	309.64	877.00	0.00	ANNUAL	ALL	00000005
470046.42000	3763921.86000	2.11817	307.89	877.00	0.00	ANNUAL	ALL	00000005
470043.89000	3763930.23000	2.10932	307.81	877.00	0.00	ANNUAL	ALL	00000005
469861.15000	3763927.09000	2.48422	302.81	866.00	0.00	ANNUAL	ALL	00000005
469861.56000	3763918.44000	2.50270	302.89	866.00	0.00	ANNUAL	ALL	00000005
469861.49000	3763913.51000	2.51364	302.94	866.00	0.00	ANNUAL	ALL	00000005
469861.43000	3763908.59000	2.52484	302.98	866.00	0.00	ANNUAL	ALL	00000005
469861.36000	3763903.67000	2.53661	303.00	866.00	0.00	ANNUAL	ALL	00000005
469861.30000	3763898.75000	2.54894	303.00	866.00	0.00	ANNUAL	ALL	00000005
469861.24000	3763893.82000	2.56136	303.00	866.00	0.00	ANNUAL	ALL	00000005
469861.17000	3763888.90000	2.57386	303.00	877.00	0.00	ANNUAL	ALL	00000005
469861.11000	3763883.98000	2.58641	303.00	877.00	0.00	ANNUAL	ALL	00000005
469861.04000	3763879.05000	2.59909	303.00	877.00	0.00	ANNUAL	ALL	00000005
469860.98000	3763874.13000	2.61027	303.06	877.00	0.00	ANNUAL	ALL	00000005
469860.92000	3763869.21000	2.62021	303.17	877.00	0.00	ANNUAL	ALL	00000005
469860.85000	3763864.28000	2.62998	303.29	877.00	0.00	ANNUAL	ALL	00000005
469860.79000	3763859.36000	2.64002	303.40	877.00	0.00	ANNUAL	ALL	00000005
469860.72000	3763854.44000	2.64986	303.52	877.00	0.00	ANNUAL	ALL	00000005
469860.66000	3763849.52000	2.65999	303.63	877.00	0.00	ANNUAL	ALL	00000005
469860.60000	3763844.59000	2.67127	303.70	877.00	0.00	ANNUAL	ALL	00000005
469860.53000	3763839.67000	2.68451	303.70	877.00	0.00	ANNUAL	ALL	00000005
469860.47000	3763834.75000	2.69783	303.70	877.00	0.00	ANNUAL	ALL	00000005
469860.40000	3763829.82000	2.71157	303.69	877.00	0.00	ANNUAL	ALL	00000005
469860.34000	3763824.90000	2.72509	303.69	877.00	0.00	ANNUAL	ALL	00000005
469860.28000	3763819.98000	2.73871	303.69	877.00	0.00	ANNUAL	ALL	00000005
469860.21000	3763815.05000	2.75249	303.69	877.00	0.00	ANNUAL	ALL	00000005
469860.15000	3763810.13000	2.76662	303.68	877.00	0.00	ANNUAL	ALL	00000005
469860.08000	3763805.21000	2.78059	303.68	877.00	0.00	ANNUAL	ALL	00000005
469860.02000	3763800.29000	2.79466	303.68	877.00	0.00	ANNUAL	ALL	00000005
469859.95000	3763795.36000	2.80890	303.68	877.00	0.00	ANNUAL	ALL	00000005
469859.89000	3763790.44000	2.82321	303.68	877.00	0.00	ANNUAL	ALL	00000005
469859.83000	3763785.52000	2.83793	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.76000	3763780.59000	2.85255	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.70000	3763775.67000	2.86724	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.63000	3763770.75000	2.88208	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.57000	3763765.83000	2.89705	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.51000	3763760.90000	2.91249	303.66	877.00	0.00	ANNUAL	ALL	00000005
469859.44000	3763755.98000	2.92746	303.67	877.00	0.00	ANNUAL	ALL	00000005
469859.38000	3763751.06000	2.94131	303.72	877.00	0.00	ANNUAL	ALL	00000005
469859.31000	3763746.13000	2.95503	303.78	877.00	0.00	ANNUAL	ALL	00000005
469859.25000	3763741.21000	2.96914	303.83	877.00	0.00	ANNUAL	ALL	00000005
469859.19000	3763736.29000	2.98306	303.89	877.00	0.00	ANNUAL	ALL	00000005
469859.12000	3763731.36000	2.99750	303.94	877.00	0.00	ANNUAL	ALL	00000005
469859.06000	3763726.44000	3.01170	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.99000	3763721.52000	3.02802	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.93000	3763716.60000	3.04449	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.87000	3763711.67000	3.06118	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.80000	3763706.75000	3.07804	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.74000	3763701.83000	3.09509	304.00	877.00	0.00	ANNUAL	ALL	00000005
469858.67000	3763696.90000	3.11238	304.00	877.00	0.00	ANNUAL	ALL	00000005
469863.60000	3763691.86000	3.11419	304.12	877.00	0.00	ANNUAL	ALL	00000005
469868.59000	3763691.74000	3.10168	304.15	877.00	0.00	ANNUAL	ALL	00000005
469873.58000	3763691.62000	3.08619	304.27	877.00	0.00	ANNUAL	ALL	00000005

469878.56000	3763691.50000	3.06980	304.42	877.00	0.00	ANNUAL	ALL	00000005
469883.55000	3763691.38000	3.05382	304.56	877.00	0.00	ANNUAL	ALL	00000005
469888.54000	3763691.26000	3.03793	304.70	877.00	0.00	ANNUAL	ALL	00000005
469893.53000	3763691.14000	3.02246	304.83	877.00	0.00	ANNUAL	ALL	00000005
469898.52000	3763691.02000	3.00676	304.97	877.00	0.00	ANNUAL	ALL	00000005
469903.51000	3763690.90000	2.99050	305.13	877.00	0.00	ANNUAL	ALL	00000005
469908.49000	3763690.78000	2.97404	305.30	877.00	0.00	ANNUAL	ALL	00000005
469913.48000	3763690.66000	2.95799	305.46	877.00	0.00	ANNUAL	ALL	00000005
469918.47000	3763690.54000	2.94173	305.63	877.00	0.00	ANNUAL	ALL	00000005
469923.46000	3763690.42000	2.92558	305.80	877.00	0.00	ANNUAL	ALL	00000005
469928.45000	3763690.29000	2.90991	305.96	877.00	0.00	ANNUAL	ALL	00000005
469933.44000	3763690.17000	2.89400	306.13	877.00	0.00	ANNUAL	ALL	00000005
469938.42000	3763690.05000	2.87855	306.29	877.00	0.00	ANNUAL	ALL	00000005
469943.41000	3763689.93000	2.86288	306.46	877.00	0.00	ANNUAL	ALL	00000005
469948.40000	3763689.81000	2.84733	306.63	877.00	0.00	ANNUAL	ALL	00000005
469953.39000	3763689.69000	2.83223	306.79	877.00	0.00	ANNUAL	ALL	00000005
469958.38000	3763689.57000	2.81693	306.96	877.00	0.00	ANNUAL	ALL	00000005
469963.37000	3763689.45000	2.80176	307.13	877.00	0.00	ANNUAL	ALL	00000005
469968.35000	3763689.33000	2.78706	307.29	877.00	0.00	ANNUAL	ALL	00000005
469973.34000	3763689.21000	2.77215	307.46	877.00	0.00	ANNUAL	ALL	00000005
469978.33000	3763689.09000	2.75769	307.62	877.00	0.00	ANNUAL	ALL	00000005
469987.95000	3763688.97000	2.72950	307.94	877.00	0.00	ANNUAL	ALL	00000005
469992.59000	3763688.97000	2.71573	308.10	877.00	0.00	ANNUAL	ALL	00000005
469997.22000	3763688.97000	2.70241	308.25	877.00	0.00	ANNUAL	ALL	00000005
470001.85000	3763688.97000	2.68890	308.41	877.00	0.00	ANNUAL	ALL	00000005
470006.48000	3763688.97000	2.67582	308.56	877.00	0.00	ANNUAL	ALL	00000005
470011.11000	3763688.97000	2.66256	308.72	877.00	0.00	ANNUAL	ALL	00000005
470015.75000	3763688.97000	2.64970	308.87	877.00	0.00	ANNUAL	ALL	00000005
470020.38000	3763688.97000	2.63668	309.03	877.00	0.00	ANNUAL	ALL	00000005
470025.01000	3763688.97000	2.62409	309.18	877.00	0.00	ANNUAL	ALL	00000005
470029.65000	3763688.97000	2.61161	309.33	877.00	0.00	ANNUAL	ALL	00000005
470034.28000	3763688.97000	2.59895	309.49	877.00	0.00	ANNUAL	ALL	00000005
470039.07000	3763693.92000	2.57188	309.65	877.00	0.00	ANNUAL	ALL	00000005
470039.23000	3763698.88000	2.55905	309.60	877.00	0.00	ANNUAL	ALL	00000005
470039.39000	3763703.83000	2.54795	309.50	877.00	0.00	ANNUAL	ALL	00000005
470039.55000	3763708.79000	2.53729	309.39	877.00	0.00	ANNUAL	ALL	00000005
470039.71000	3763713.75000	2.52650	309.29	877.00	0.00	ANNUAL	ALL	00000005
470039.87000	3763718.70000	2.51619	309.18	877.00	0.00	ANNUAL	ALL	00000005
470040.03000	3763723.66000	2.50631	309.06	877.00	0.00	ANNUAL	ALL	00000005
470040.19000	3763728.61000	2.49545	308.98	877.00	0.00	ANNUAL	ALL	00000005
470040.35000	3763733.57000	2.48389	308.93	877.00	0.00	ANNUAL	ALL	00000005
470040.51000	3763738.52000	2.47252	308.88	877.00	0.00	ANNUAL	ALL	00000005
470040.67000	3763743.48000	2.46130	308.83	877.00	0.00	ANNUAL	ALL	00000005
470040.83000	3763748.43000	2.44999	308.79	877.00	0.00	ANNUAL	ALL	00000005
470040.99000	3763753.39000	2.43909	308.74	877.00	0.00	ANNUAL	ALL	00000005
470041.15000	3763758.34000	2.42756	308.72	877.00	0.00	ANNUAL	ALL	00000005
470041.31000	3763763.30000	2.41562	308.72	877.00	0.00	ANNUAL	ALL	00000005
470041.47000	3763768.25000	2.40361	308.73	877.00	0.00	ANNUAL	ALL	00000005
470041.63000	3763773.21000	2.39201	308.73	877.00	0.00	ANNUAL	ALL	00000005
470041.79000	3763778.16000	2.38033	308.74	877.00	0.00	ANNUAL	ALL	00000005
470041.95000	3763783.12000	2.36904	308.74	877.00	0.00	ANNUAL	ALL	00000005
470042.11000	3763788.07000	2.35766	308.75	877.00	0.00	ANNUAL	ALL	00000005
470042.27000	3763793.03000	2.34641	308.76	877.00	0.00	ANNUAL	ALL	00000005
470042.43000	3763797.98000	2.33559	308.76	877.00	0.00	ANNUAL	ALL	00000005
470042.59000	3763802.94000	2.32462	308.77	877.00	0.00	ANNUAL	ALL	00000005
470042.74000	3763807.89000	2.31408	308.77	877.00	0.00	ANNUAL	ALL	00000005
470042.90000	3763812.85000	2.30339	308.78	877.00	0.00	ANNUAL	ALL	00000005
470043.06000	3763817.80000	2.29309	308.78	877.00	0.00	ANNUAL	ALL	00000005
470043.22000	3763822.76000	2.28264	308.79	877.00	0.00	ANNUAL	ALL	00000005
470043.38000	3763827.71000	2.27258	308.79	877.00	0.00	ANNUAL	ALL	00000005
470043.54000	3763832.67000	2.26237	308.80	877.00	0.00	ANNUAL	ALL	00000005
470043.70000	3763837.62000	2.25253	308.80	877.00	0.00	ANNUAL	ALL	00000005
470043.86000	3763842.58000	2.24255	308.81	877.00	0.00	ANNUAL	ALL	00000005
470044.02000	3763847.53000	2.23340	308.79	877.00	0.00	ANNUAL	ALL	00000005
470044.18000	3763852.49000	2.22691	308.66	877.00	0.00	ANNUAL	ALL	00000005
470044.34000	3763857.44000	2.22072	308.52	877.00	0.00	ANNUAL	ALL	00000005
470044.50000	3763862.40000	2.21432	308.39	877.00	0.00	ANNUAL	ALL	00000005
470044.66000	3763867.35000	2.20821	308.25	877.00	0.00	ANNUAL	ALL	00000005
470044.82000	3763872.31000	2.20188	308.12	877.00	0.00	ANNUAL	ALL	00000005
470044.98000	3763877.26000	2.19539	308.00	877.00	0.00	ANNUAL	ALL	00000005
470045.14000	3763882.22000	2.18692	307.97	877.00	0.00	ANNUAL	ALL	00000005
470045.30000	3763887.17000	2.17832	307.95	877.00	0.00	ANNUAL	ALL	00000005
470045.46000	3763892.13000	2.16976	307.93	877.00	0.00	ANNUAL	ALL	00000005

470045.62000	3763897.08000	2.16129	307.91	877.00	0.00	ANNUAL	ALL	00000005
470045.78000	3763902.04000	2.15287	307.89	877.00	0.00	ANNUAL	ALL	00000005
470045.94000	3763907.00000	2.14431	307.88	877.00	0.00	ANNUAL	ALL	00000005
470046.10000	3763911.95000	2.13560	307.88	877.00	0.00	ANNUAL	ALL	00000005
470046.26000	3763916.90000	2.12676	307.89	877.00	0.00	ANNUAL	ALL	00000005
470045.16000	3763926.04000	2.11375	307.85	877.00	0.00	ANNUAL	ALL	00000005
470038.95000	3763930.15000	2.11979	307.64	877.00	0.00	ANNUAL	ALL	00000005
470034.01000	3763930.06000	2.13010	307.48	877.00	0.00	ANNUAL	ALL	00000005
470029.07000	3763929.98000	2.14042	307.32	877.00	0.00	ANNUAL	ALL	00000005
470024.13000	3763929.89000	2.15099	307.15	877.00	0.00	ANNUAL	ALL	00000005
470019.20000	3763929.81000	2.16136	306.99	877.00	0.00	ANNUAL	ALL	00000005
470014.26000	3763929.72000	2.17199	306.82	877.00	0.00	ANNUAL	ALL	00000005
470009.32000	3763929.64000	2.18241	306.66	877.00	0.00	ANNUAL	ALL	00000005
470004.38000	3763929.55000	2.19310	306.49	877.00	0.00	ANNUAL	ALL	00000005
469999.44000	3763929.47000	2.20358	306.33	877.00	0.00	ANNUAL	ALL	00000005
469994.50000	3763929.38000	2.21431	306.16	877.00	0.00	ANNUAL	ALL	00000005
469989.56000	3763929.30000	2.22484	306.00	877.00	0.00	ANNUAL	ALL	00000005
469984.62000	3763929.21000	2.23477	305.87	877.00	0.00	ANNUAL	ALL	00000005
469979.68000	3763929.13000	2.24448	305.75	877.00	0.00	ANNUAL	ALL	00000005
469974.75000	3763929.04000	2.25422	305.63	877.00	0.00	ANNUAL	ALL	00000005
469969.81000	3763928.96000	2.26397	305.51	877.00	0.00	ANNUAL	ALL	00000005
469964.87000	3763928.87000	2.27376	305.39	877.00	0.00	ANNUAL	ALL	00000005
469959.93000	3763928.79000	2.28354	305.27	877.00	0.00	ANNUAL	ALL	00000005
469954.99000	3763928.70000	2.29182	305.22	877.00	0.00	ANNUAL	ALL	00000005
469950.05000	3763928.62000	2.29986	305.18	877.00	0.00	ANNUAL	ALL	00000005
469945.11000	3763928.53000	2.30793	305.14	877.00	0.00	ANNUAL	ALL	00000005
469940.17000	3763928.45000	2.31620	305.09	877.00	0.00	ANNUAL	ALL	00000005
469935.23000	3763928.36000	2.32426	305.05	866.00	0.00	ANNUAL	ALL	00000005
469930.29000	3763928.28000	2.33230	305.01	866.00	0.00	ANNUAL	ALL	00000005
469925.36000	3763928.19000	2.34284	304.86	866.00	0.00	ANNUAL	ALL	00000005
469920.42000	3763928.11000	2.35385	304.69	866.00	0.00	ANNUAL	ALL	00000005
469915.48000	3763928.02000	2.36467	304.53	866.00	0.00	ANNUAL	ALL	00000005
469910.54000	3763927.94000	2.37573	304.36	866.00	0.00	ANNUAL	ALL	00000005
469905.60000	3763927.85000	2.38660	304.20	866.00	0.00	ANNUAL	ALL	00000005
469900.66000	3763927.77000	2.39748	304.04	866.00	0.00	ANNUAL	ALL	00000005
469895.72000	3763927.68000	2.40863	303.87	866.00	0.00	ANNUAL	ALL	00000005
469890.78000	3763927.60000	2.41955	303.71	866.00	0.00	ANNUAL	ALL	00000005
469885.84000	3763927.51000	2.43075	303.54	866.00	0.00	ANNUAL	ALL	00000005
469880.91000	3763927.43000	2.44171	303.38	866.00	0.00	ANNUAL	ALL	00000005
469875.97000	3763927.35000	2.45294	303.21	866.00	0.00	ANNUAL	ALL	00000005
469871.03000	3763927.26000	2.46399	303.05	866.00	0.00	ANNUAL	ALL	00000005
469866.09000	3763927.17000	2.47435	302.92	866.00	0.00	ANNUAL	ALL	00000005
469297.02000	3763320.57000	12.35554	293.34	877.00	0.00	ANNUAL	ALL	00000005
469299.44000	3763360.06000	10.95064	294.00	877.00	0.00	ANNUAL	ALL	00000005
469305.88000	3763375.38000	10.34667	294.65	877.00	0.00	ANNUAL	ALL	00000005
469296.21000	3763406.01000	9.61006	294.89	877.00	0.00	ANNUAL	ALL	00000005
469316.36000	3763281.07000	13.97994	290.08	877.00	0.00	ANNUAL	ALL	00000005
469355.86000	3763287.52000	12.65932	292.53	877.00	0.00	ANNUAL	ALL	00000005
469395.36000	3763286.71000	11.76937	293.87	877.00	0.00	ANNUAL	ALL	00000005
469357.47000	3763303.64000	11.88477	293.73	877.00	0.00	ANNUAL	ALL	00000005
469338.93000	3763318.15000	11.67013	294.09	877.00	0.00	ANNUAL	ALL	00000005
469356.67000	3763317.34000	11.36246	294.62	877.00	0.00	ANNUAL	ALL	00000005
469382.46000	3763316.54000	10.85015	295.68	877.00	0.00	ANNUAL	ALL	00000005
469338.93000	3763336.69000	10.92942	295.32	877.00	0.00	ANNUAL	ALL	00000005
469362.31000	3763333.46000	10.42114	295.97	877.00	0.00	ANNUAL	ALL	00000005
469355.86000	3763347.97000	10.07021	296.26	877.00	0.00	ANNUAL	ALL	00000005
469375.20000	3763347.17000	9.72254	297.21	877.00	0.00	ANNUAL	ALL	00000005
469397.77000	3763349.58000	9.26413	298.27	877.00	0.00	ANNUAL	ALL	00000005
469349.41000	3763390.69000	8.96579	297.19	877.00	0.00	ANNUAL	ALL	00000005
469395.36000	3763388.28000	8.38351	298.78	877.00	0.00	ANNUAL	ALL	00000005
469251.42000	3763375.11000	11.14696	293.57	877.00	0.00	ANNUAL	ALL	00000005
469252.71000	3763389.58000	10.63257	293.87	877.00	0.00	ANNUAL	ALL	00000005
469263.31000	3763402.50000	10.13757	294.00	877.00	0.00	ANNUAL	ALL	00000005
469252.46000	3763415.17000	9.89569	294.00	877.00	0.00	ANNUAL	ALL	00000005
469303.88000	3763389.84000	9.93794	294.95	877.00	0.00	ANNUAL	ALL	00000005
469294.57000	3763341.20000	11.61553	293.86	877.00	0.00	ANNUAL	ALL	00000005
469194.84000	3763436.71000	10.05852	292.51	866.00	0.00	ANNUAL	ALL	00000005
469197.37000	3763450.18000	9.64770	292.59	866.00	0.00	ANNUAL	ALL	00000005
469198.63000	3763467.01000	9.19786	292.76	866.00	0.00	ANNUAL	ALL	00000005
469205.78000	3763480.05000	8.80574	292.97	866.00	0.00	ANNUAL	ALL	00000005
469258.38000	3763432.51000	9.39486	294.00	866.00	0.00	ANNUAL	ALL	00000005
469255.85000	3763478.79000	8.36319	294.00	866.00	0.00	ANNUAL	ALL	00000005
469258.38000	3763450.60000	8.96124	294.00	866.00	0.00	ANNUAL	ALL	00000005

469255.01000	3763464.90000	8.66411	294.00	866.00	0.00	ANNUAL	ALL	00000005
469351.37000	3763439.24000	7.92991	297.30	877.00	0.00	ANNUAL	ALL	00000005
469267.04000	3763287.77000	14.99130	287.69	877.00	0.00	ANNUAL	ALL	00000005
469266.45000	3763289.56000	14.91656	287.93	877.00	0.00	ANNUAL	ALL	00000005
469399.71000	3763442.01000	7.37194	298.66	877.00	0.00	ANNUAL	ALL	00000005
469365.93000	3763458.90000	7.48188	297.21	877.00	0.00	ANNUAL	ALL	00000005
469352.53000	3763479.29000	7.27847	296.76	877.00	0.00	ANNUAL	ALL	00000005
469350.20000	3763497.93000	7.00448	296.69	866.00	0.00	ANNUAL	ALL	00000005
469405.53000	3763502.01000	6.52339	297.76	877.00	0.00	ANNUAL	ALL	00000005
469907.06000	3763299.93000	5.44346	306.61	914.00	0.00	ANNUAL	ALL	00000005
469864.97000	3763353.38000	5.11695	305.56	914.00	0.00	ANNUAL	ALL	00000005
469870.02000	3763382.42000	4.76405	306.55	914.00	0.00	ANNUAL	ALL	00000005
469872.96000	3763416.94000	4.43005	307.11	914.00	0.00	ANNUAL	ALL	00000005
469871.28000	3763445.13000	4.22266	307.06	877.00	0.00	ANNUAL	ALL	00000005
469914.63000	3763322.24000	5.06452	308.27	914.00	0.00	ANNUAL	ALL	00000005
469924.31000	3763345.39000	4.74264	309.28	914.00	0.00	ANNUAL	ALL	00000005
469920.52000	3763375.69000	4.52353	308.70	914.00	0.00	ANNUAL	ALL	00000005
469924.73000	3763401.36000	4.29453	308.84	914.00	0.00	ANNUAL	ALL	00000005
469918.42000	3763449.34000	3.99779	308.15	914.00	0.00	ANNUAL	ALL	00000005
470012.27000	3763285.62000	4.89936	311.47	914.00	0.00	ANNUAL	ALL	00000005
470013.54000	3763314.66000	4.57106	312.00	914.00	0.00	ANNUAL	ALL	00000005
470019.43000	3763339.49000	4.33484	312.00	914.00	0.00	ANNUAL	ALL	00000005
470020.27000	3763368.54000	4.10481	311.95	914.00	0.00	ANNUAL	ALL	00000005
470016.48000	3763400.52000	3.93385	310.99	914.00	0.00	ANNUAL	ALL	00000005
469981.55000	3763427.46000	3.88880	309.99	914.00	0.00	ANNUAL	ALL	00000005
470016.48000	3763446.40000	3.64044	310.90	914.00	0.00	ANNUAL	ALL	00000005
469970.19000	3763444.29000	3.82389	309.62	914.00	0.00	ANNUAL	ALL	00000005
470069.93000	3763284.36000	4.72615	311.76	914.00	0.00	ANNUAL	ALL	00000005
470062.36000	3763314.24000	4.42168	312.26	914.00	0.00	ANNUAL	ALL	00000005
470064.04000	3763348.75000	4.08499	313.00	914.00	0.00	ANNUAL	ALL	00000005
470060.67000	3763382.42000	3.86429	312.67	914.00	0.00	ANNUAL	ALL	00000005
470064.88000	3763417.78000	3.63189	312.51	914.00	0.00	ANNUAL	ALL	00000005
470061.52000	3763450.18000	3.48758	311.61	914.00	0.00	ANNUAL	ALL	00000005
470064.04000	3763480.07000	3.32403	311.48	914.00	0.00	ANNUAL	ALL	00000005
470063.20000	3763505.74000	3.19598	311.45	914.00	0.00	ANNUAL	ALL	00000005
470010.59000	3763484.27000	3.46996	310.05	914.00	0.00	ANNUAL	ALL	00000005
469968.50000	3763487.22000	3.57897	309.29	877.00	0.00	ANNUAL	ALL	00000005
469928.52000	3763487.64000	3.73308	307.96	877.00	0.00	ANNUAL	ALL	00000005
469893.17000	3763489.33000	3.86198	307.00	877.00	0.00	ANNUAL	ALL	00000005
469850.24000	3763487.64000	4.03167	306.35	877.00	0.00	ANNUAL	ALL	00000005
469875.91000	3763626.53000	3.29073	305.21	877.00	0.00	ANNUAL	ALL	00000005
469874.23000	3763607.17000	3.37886	305.15	877.00	0.00	ANNUAL	ALL	00000005
469872.96000	3763590.76000	3.43791	305.58	877.00	0.00	ANNUAL	ALL	00000005
469880.12000	3763568.87000	3.50022	306.09	877.00	0.00	ANNUAL	ALL	00000005
469904.11000	3763562.56000	3.44891	306.55	877.00	0.00	ANNUAL	ALL	00000005
469927.26000	3763564.66000	3.36551	306.95	877.00	0.00	ANNUAL	ALL	00000005
469927.68000	3763589.07000	3.25398	306.94	877.00	0.00	ANNUAL	ALL	00000005
469923.89000	3763611.38000	3.17407	306.81	877.00	0.00	ANNUAL	ALL	00000005
469922.21000	3763628.21000	3.11385	306.75	877.00	0.00	ANNUAL	ALL	00000005
469976.92000	3763571.82000	3.15890	308.58	877.00	0.00	ANNUAL	ALL	00000005
469969.77000	3763589.49000	3.10629	308.34	877.00	0.00	ANNUAL	ALL	00000005
469972.29000	3763608.01000	3.02468	308.37	877.00	0.00	ANNUAL	ALL	00000005
469974.40000	3763625.69000	2.97129	307.85	877.00	0.00	ANNUAL	ALL	00000005
470014.38000	3763621.48000	2.87402	308.91	877.00	0.00	ANNUAL	ALL	00000005
470033.74000	3763611.80000	2.85714	309.47	877.00	0.00	ANNUAL	ALL	00000005
470026.16000	3763587.39000	2.95728	309.72	877.00	0.00	ANNUAL	ALL	00000005
470021.95000	3763565.50000	3.04583	310.03	877.00	0.00	ANNUAL	ALL	00000005
469992.49000	3763562.98000	3.14743	309.10	877.00	0.00	ANNUAL	ALL	00000005
470057.73000	3763606.75000	2.80948	310.27	877.00	0.00	ANNUAL	ALL	00000005
470050.99000	3763583.60000	2.91860	310.05	877.00	0.00	ANNUAL	ALL	00000005
470066.15000	3763565.92000	2.93682	310.90	877.00	0.00	ANNUAL	ALL	00000005
470095.61000	3763563.82000	2.86181	311.96	877.00	0.00	ANNUAL	ALL	00000005
470109.92000	3763586.55000	2.74929	312.01	877.00	0.00	ANNUAL	ALL	00000005
470104.87000	3763610.54000	2.67348	311.84	877.00	0.00	ANNUAL	ALL	00000005
470098.55000	3763632.84000	2.61153	311.63	877.00	0.00	ANNUAL	ALL	00000005
470088.03000	3763642.94000	2.60366	311.28	877.00	0.00	ANNUAL	ALL	00000005
470058.99000	3763651.78000	2.64836	310.31	877.00	0.00	ANNUAL	ALL	00000005
470032.90000	3763660.62000	2.68953	309.44	877.00	0.00	ANNUAL	ALL	00000005
470014.38000	3763662.30000	2.73564	308.83	877.00	0.00	ANNUAL	ALL	00000005
469995.44000	3763664.41000	2.78412	308.19	877.00	0.00	ANNUAL	ALL	00000005
469974.82000	3763662.72000	2.85181	307.51	877.00	0.00	ANNUAL	ALL	00000005
469954.61000	3763661.04000	2.92041	306.86	877.00	0.00	ANNUAL	ALL	00000005
469934.83000	3763661.46000	2.98008	306.31	877.00	0.00	ANNUAL	ALL	00000005

469917.58000	3763664.41000	3.03033	305.67	877.00	0.00	ANNUAL	ALL	00000005
469895.27000	3763666.09000	3.09910	305.01	877.00	0.00	ANNUAL	ALL	00000005
469875.07000	3763663.57000	3.15658	305.02	877.00	0.00	ANNUAL	ALL	00000005
470074.14000	3763682.93000	2.51384	310.82	877.00	0.00	ANNUAL	ALL	00000005
470085.08000	3763683.77000	2.48485	311.18	877.00	0.00	ANNUAL	ALL	00000005
470098.55000	3763683.77000	2.45284	311.63	877.00	0.00	ANNUAL	ALL	00000005
470109.07000	3763683.77000	2.42853	311.98	877.00	0.00	ANNUAL	ALL	00000005
469364.11000	3763743.02000	4.68645	293.53	773.00	0.00	ANNUAL	ALL	00000005
468835.94000	3763718.64000	6.90137	283.67	773.00	0.00	ANNUAL	ALL	00000005
468478.41000	3763653.64000	7.97512	276.36	739.00	0.00	ANNUAL	ALL	00000005
468100.57000	3763157.97000	12.24481	272.00	686.00	0.00	ANNUAL	ALL	00000005
467994.94000	3762637.94000	15.21274	271.00	686.00	0.00	ANNUAL	ALL	00000005
468068.07000	3762329.16000	14.73586	272.00	704.00	0.00	ANNUAL	ALL	00000005
469108.15000	3762036.64000	5.95392	289.62	939.00	0.00	ANNUAL	ALL	00000005
469477.86000	3762146.34000	5.74879	299.62	939.00	0.00	ANNUAL	ALL	00000005
469733.82000	3762381.98000	9.78122	306.47	939.00	0.00	ANNUAL	ALL	00000005
469685.07000	3762999.53000	19.75607	303.85	914.00	0.00	ANNUAL	ALL	00000005
468059.13000	3763610.98000	6.17700	269.15	739.00	0.00	ANNUAL	ALL	00000005

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

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Appendix C: Energy Consumption Calculations

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Appendix C: Energy Consumption Calculations

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Riverside Palmyrita Avenue Warehouse Project Energy Use Summary

Scenario 1: 100% Warehouse

Summary of Energy Use During Construction		(Annually)
Construction equipment fuel	35,152	gallons (gasoline, diesel)
Construction vehicle fuel	69,302	gallons (diesel)
Total construction fuel	104,454	gallons (gasoline, diesel)
Construction office electricity	5,529	kilowatt hours

Summary of Energy Use During Operations		(Annually)
Operation vehicle fuel	356,297	gallons (gasoline, diesel)
Operation natural gas	556,610	kilo-British Thermal Units
Operation electricity	812,617	kilowatt hours

Scenario 2: 75% Warehouse + 25% Manufacturing

Summary of Energy Use During Construction		(Annually)
Construction equipment fuel	35,152	gallons (gasoline, diesel)
Construction vehicle fuel	68,695	gallons (diesel)
Total construction fuel	103,847	gallons (gasoline, diesel)
Construction office electricity	5,529	kilowatt hours

Summary of Energy Use During Operations		(Annually)
Operation vehicle fuel	325,463	gallons (gasoline, diesel)
Operation natural gas	2,352,737	kilo-British Thermal Units
Operation electricity	1,157,996	kilowatt hours

Scenario 1 Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>.

EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

VehClass	MdlYr	Speed	Fuel	Population	Consumption		Calculations	
					VMT (mi/day)	(1000 gallons/day)	FE (mi/gallon)	VMT*FE
HHDT	Aggregated	Aggregated	GAS	11.93633652	249170.008	67.19986647	3.70789439	923896.07
HHDT	Aggregated	Aggregated	DSL	25146.10122	1271489443	209883.4735	6.05807319	7.703E+09
LDA	Aggregated	Aggregated	GAS	630286.4475	9018576309	313198.7025	28.7950628	2.597E+11
LDA	Aggregated	Aggregated	DSL	2079.221075	25367559.2	600.5815939	42.2383227	1.071E+09
LDT1	Aggregated	Aggregated	GAS	57862.96001	732627799	30848.11342	23.7495171	1.74E+10
LDT1	Aggregated	Aggregated	DSL	31.04422619	208303.278	8.568513904	24.3103157	5063918.4
LDT2	Aggregated	Aggregated	GAS	269494.9026	3990762611	170906.308	23.350587	9.319E+10
LDT2	Aggregated	Aggregated	DSL	851.0940842	13372289.5	419.0304327	31.9124543	426742578
LHDT1	Aggregated	Aggregated	GAS	24429.19054	291677994	22100.44135	13.1978357	3.85E+09
LHDT1	Aggregated	Aggregated	DSL	19515.75426	237356221	11591.74896	20.4763079	4.86E+09
LHDT2	Aggregated	Aggregated	GAS	3795.455147	43857690.6	3740.14748	11.7261928	514283738
LHDT2	Aggregated	Aggregated	DSL	8669.58227	106527003	6259.54676	17.0183253	1.813E+09
MHDT	Aggregated	Aggregated	GAS	1955.423253	32763096	6397.487959	5.12124388	167787805
MHDT	Aggregated	Aggregated	DSL	15232.37207	214039560	23944.75251	8.93889215	1.913E+09

Worker
Sum of VMT*FE (Column BI) 3.718E+11
Total VMT 1.378E+10
Weighted Average FE 26.977887

Vendor

Sum of VMT*FE (Column BI) 2.082E+10
 Total VMT 2.198E+09
 Weighted Average FE 9.4731728

Haul
 Sum of VMT*FE (Column BI) 7.704E+09
 Total VMT 1.272E+09
 Weighted Average FE 6.0576127

Construction Parameters

Source: AQ/GHG Appendix, CalEEMod Output
 Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual
 Date: 10/21/2022 10:38 AM

Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Num Days	
				Week	Num Days
Main Site Construction					
Demolition	Demolition	11/20/2023	12/15/2023	5	20
Grading	Grading	11/20/2023	12/15/2023	5	20
Building Construction	Building Construction	12/18/2023	9/20/2024	5	200
Paving	Paving	7/29/2024	8/23/2024	5	20
Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
Frontage Construction					
Grading	Grading	11/27/2023	11/28/2023	5	2
Paving	Paving	12/6/2023	12/12/2023	5	5
Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5

Construction Trips and VMT

Phase Name	Trips per Day		Total Trips	Construction Trip Length in Miles			Number of Days per Phase	Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
	Worker Trip Number	Vendor Trip Number		Hauling Trip Number	Worker Trip Length	Vendor Trip Length		Hauling Trip Length	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips
Main Site Construction																
Demolition	15	0	1410	19.8	7.9	20	20	300	0	1,410	5,940	0	28,200	220.18	0.00	4,655.30
Site Preparation	20	0	3000	19.8	7.9	20	20	400	0	3,000	7,920	0	60,000	293.57	0.00	9,904.89
Grading	251	98	0	19.8	7.9	20	200	50,200	19,600	0	993,960	154,840	0	36,843.51	16,345.10	0.00
Building Construction	15	0	0	19.8	7.9	20	20	300	0	0	5,940	0	0	220.18	0.00	0.00
Paving	50	0	0	19.8	7.9	20	20	1,000	0	0	19,800	0	0	733.93	0.00	0.00
Frontage Construction																
Grading	8	0	0	19.8	7.9	20	2	16	0	0	317	0	0	11.74	0.00	0.00
Paving	18	0	0	19.8	7.9	20	5	90	0	0	1,782	0	0	66.05	0.00	0.00
Architectural Coating	2	0	0	19.8	7.9	20	5	10	0	0	198	0	0	7.34	0.00	0.00

Total Project Construction VMT (miles)
1,278,897

Total Project Fuel Consumption (gallons)
69,302 18.45 MPG

Scenario 2 Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>.

EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

VehClass	MdlYr	Speed	Fuel	Population	Consumption		Calculations	
					VMT (mi/day)	(1000 gallons/day)	FE (mi/gallon)	VMT*FE
HHDT	Aggregated	Aggregated	GAS	11.93633652	249170.008	67.19986647	3.70789439	923896.07
HHDT	Aggregated	Aggregated	DSL	25146.10122	1271489443	209883.4735	6.05807319	7.703E+09
LDA	Aggregated	Aggregated	GAS	630286.4475	9018576309	313198.7025	28.7950628	2.597E+11
LDA	Aggregated	Aggregated	DSL	2079.221075	25367559.2	600.5815939	42.2383227	1.071E+09
LDT1	Aggregated	Aggregated	GAS	57862.96001	732627799	30848.11342	23.7495171	1.74E+10
LDT1	Aggregated	Aggregated	DSL	31.04422619	208303.278	8.568513904	24.3103157	5063918.4
LDT2	Aggregated	Aggregated	GAS	269494.9026	3990762611	170906.308	23.350587	9.319E+10
LDT2	Aggregated	Aggregated	DSL	851.0940842	13372289.5	419.0304327	31.9124543	426742578
LHDT1	Aggregated	Aggregated	GAS	24429.19054	291677994	22100.44135	13.1978357	3.85E+09
LHDT1	Aggregated	Aggregated	DSL	19515.75426	237356221	11591.74896	20.4763079	4.86E+09
LHDT2	Aggregated	Aggregated	GAS	3795.455147	43857690.6	3740.14748	11.7261928	514283738
LHDT2	Aggregated	Aggregated	DSL	8669.58227	106527003	6259.54676	17.0183253	1.813E+09
MHDT	Aggregated	Aggregated	GAS	1955.423253	32763096	6397.487959	5.12124388	167787805
MHDT	Aggregated	Aggregated	DSL	15232.37207	214039560	23944.75251	8.93889215	1.913E+09

Worker

Sum of VMT*FE (Column BI) 3.718E+11

Total VMT 1.378E+10

Weighted Average FE 26.977887

Vendor
Sum of VMT*FE (Column BI) 2.082E+10
Total VMT 2.198E+09
Weighted Average FE 9.4731728

Haul
Sum of VMT*FE (Column BI) 7.704E+09
Total VMT 1.272E+09
Weighted Average FE 6.0576127

Construction Parameters

Source: AQ/GHG Appendix, CalEEMod Output
 Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual
 Date: 10/21/2022 10:48 AM

Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Num Days	
				Week	Num Days
Main Site Construction					
Demolition	Demolition	11/20/2023	12/15/2023	5	20
Grading	Grading	11/20/2023	12/15/2023	5	20
Building Construction	Building Construction	12/18/2023	9/20/2024	5	200
Paving	Paving	7/29/2024	8/23/2024	5	20
Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
Frontage Construction					
Grading	Grading	11/27/2023	11/28/2023	5	2
Paving	Paving	12/6/2023	12/12/2023	5	5
Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5

Construction Trips and VMT

Phase Name	Trips per Day		Total Trips	Construction Trip Length in Miles			Number of Days per Phase	Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
	Worker Trip Number	Vendor Trip Number		Worker Trip Length	Vendor Trip Length	Hauling Trip Length		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Main Site Construction																
Demolition	15	0	1410	19.8	7.9	20	20	300	0	1,410	5,940	0	28,200	220.18	0.00	4,655.30
Site Preparation	20	0	3000	19.8	7.9	20	20	400	0	3,000	7,920	0	60,000	293.57	0.00	9,904.89
Grading	248	97	0	19.8	7.9	20	200	49,600	19,400	0	982,080	153,260	0	36,403.15	16,178.32	0.00
Building Construction	15	0	0	19.8	7.9	20	20	300	0	0	5,940	0	0	220.18	0.00	0.00
Paving	50	0	0	19.8	7.9	20	20	1,000	0	0	19,800	0	0	733.93	0.00	0.00
Frontage Construction																
Grading	8	0	0	19.8	7.9	20	2	16	0	0	317	0	0	11.74	0.00	0.00
Paving	18	0	0	19.8	7.9	20	5	90	0	0	1,782	0	0	66.05	0.00	0.00
Architectural Coating	2	0	0	19.8	7.9	20	5	10	0	0	198	0	0	7.34	0.00	0.00

Total Project Construction VMT (miles)
1,265,437

Total Project Fuel Consumption (gallons)
68,695 18.42 MPG

Scenario 1 and Scenario 2 Construction Equipment Fuel Calculation

Source: AQ/GHG Appendix, CalEEMod Output

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:38 AM

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:46 AM

Riverside Palmyrita Avenue Frontage Construction - Riverside-South Coast County, Annual

Date: 10/12/2022 11:26 AM

Construction Schedule

CalEEMod Run	Phase Type	Start Date	End Date	Num Days	
				Week	Num Days
Main Site Construction					
Demolition	Demolition	11/20/2023	12/15/2023	5	20
Grading	Grading	11/20/2023	12/15/2023	5	20
Building Construction	Building Construction	12/18/2023	9/20/2024	5	200
Paving	Paving	7/29/2024	8/23/2024	5	20
Architectural Coating	Architectural Coating	8/26/2024	9/20/2024	5	20
Frontage Construction					
Grading	Grading	11/27/2023	11/28/2023	5	2
Paving	Paving	12/6/2023	12/12/2023	5	5
Architectural Coating	Architectural Coating	12/13/2023	12/19/2023	5	5

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel
								Usage
Main Site Construction								
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9460.8	473.04
Demolition	Excavators	3	8	158	0.38	20	28819.2	1,440.96
Demolition	Rubber Tired Dozers	2	8	247	0.4	20	31616	1,580.80
Grading	Excavators	2	8	158	0.38	20	19212.8	960.64
Grading	Graders	1	8	187	0.41	20	12267.2	613.36
Grading	Rubber Tired Dozers	1	8	247	0.4	20	15808	790.40
Grading	Scrapers	2	8	367	0.48	20	56371.2	2,818.56
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	20	11484.8	574.24
Building Construction	Cranes	1	7	231	0.29	200	93786	4,689.30
Building Construction	Forklifts	3	8	89	0.2	200	85440	4,272.00
Building Construction	Generator Sets	1	8	84	0.74	200	99456	4,972.80
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	200	150738	7,536.90
Building Construction	Welders	1	8	46	0.45	200	33120	1,656.00
Paving	Pavers	2	8	130	0.42	20	17472	873.60
Paving	Paving Equipment	2	8	132	0.36	20	15206.4	760.32
Paving	Rollers	2	8	80	0.38	20	9728	486.40
Architectural Coating	Air Compressors	1	6	78	0.48	20	4492.8	224.64
Frontage Construction								
Grading	Graders	1	6	187	0.41	2	920.04	46.00
Grading	Rubber Tired Dozers	1	6	247	0.4	2	1185.6	59.28
Grading	Tractors/Loaders/Backhoes	1	7	97	0.37	2	502.46	25.12
Paving	Tractors/Loaders/Backhoes	1	7	97	0.37	5	1256.15	62.81
Paving	Cement and Mortar Mixers	4	6	9	0.56	5	604.8	30.24
Paving	Pavers	1	7	130	0.42	5	1911	95.55
Paving	Rollers	1	7	80	0.38	5	1064	53.20
Architectural Coating	Air Compressors	1	6	78	0.48	5	1123.2	56.16

Total Construction Equipment Fuel Consumption (gallons) 35,152.32

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Anri

Date: 10/13/2022 10:06 AM

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6616.8	1.1735	1.0000e-004	1.0000e-005	1.1795
Total		1.1735	1.0000e-004	1.0000e-005	1.1795

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual

6,617 kWh/yr

Total Over Construction

5,529 kWh

Total Construction Schedule

Start

11/20/2023

End

9/20/2024

Total Calendar Days

305

Years

0.84

Scenario 1 Project Operational Fuel Calculation

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>

EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Calculations

VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel		Calculations	
						Consumption	FE	VMT*FE	
HHDT	Aggregated	Aggregated	GAS	9.98880317	229926.8053	61.15993723	3.759434946	864394.867	
HHDT	Aggregated	Aggregated	DSL	26140.27083	1299849740	211707.9614	6.139824555	7980849354	
LDA	Aggregated	Aggregated	GAS	629406.9139	9026169518	307217.5412	29.3803846	2.65192E+11	
LDA	Aggregated	Aggregated	DSL	1959.753877	23467406.53	550.8585655	42.60150972	999746947.2	
LDT1	Aggregated	Aggregated	GAS	56644.68754	723077286.3	29861.92548	24.21402085	17508608489	
LDT1	Aggregated	Aggregated	DSL	27.91479909	184552.3879	7.565315892	24.39453825	4502070.285	
LDT2	Aggregated	Aggregated	GAS	277174.2091	4130284696	172167.2291	23.98995858	99085358773	
LDT2	Aggregated	Aggregated	DSL	899.7266747	14146533.68	432.6141314	32.70011923	462593337.9	
LHDT1	Aggregated	Aggregated	GAS	24193.88471	292531383.4	21522.2472	13.59204644	3976100149	
LHDT1	Aggregated	Aggregated	DSL	19420.71943	235769779.3	11445.23717	20.59981597	4856814065	
LHDT2	Aggregated	Aggregated	GAS	3740.394968	43279141.22	3610.229582	11.98791939	518826856.3	
LHDT2	Aggregated	Aggregated	DSL	8700.338779	106284875.1	6194.709751	17.15736158	1823568032	
MCY	Aggregated	Aggregated	GAS	31064.5051	63559961.88	1520.58781	41.79959979	2656780970	
MDV	Aggregated	Aggregated	GAS	216020.6112	3018517564	156155.571	19.33019453	58348531695	
MDV	Aggregated	Aggregated	DSL	3144.465844	45103228.43	1903.622076	23.69337328	1068647627	
MH	Aggregated	Aggregated	GAS	5910.354464	16942140.69	3480.000918	4.868429949	82481625.15	
MH	Aggregated	Aggregated	DSL	2677.341817	7619770.059	734.6301665	10.37225315	79034183.99	
MHDT	Aggregated	Aggregated	GAS	1944.487553	33151205.76	6394.504234	5.184327752	171866716	
MHDT	Aggregated	Aggregated	DSL	15553.21883	217266211.5	24221.91494	8.969819771	1948838759	
OBUS	Aggregated	Aggregated	GAS	532.6451141	7702310.612	1507.886099	5.108018847	39343547.77	
OBUS	Aggregated	Aggregated	DSL	277.631711	5792989.212	770.5102623	7.518380345	43553896.23	
SBUS	Aggregated	Aggregated	GAS	525.825866	7891167.724	888.012343	8.886326623	70123493.83	
SBUS	Aggregated	Aggregated	DSL	657.5906938	4493866.771	612.5565266	7.33624829	32968122.42	
UBUS	Aggregated	Aggregated	GAS	146.2127201	6053134.018	1073.421016	5.639105188	34134259.44	
UBUS	Aggregated	Aggregated	DSL	0.3117338	9845.875493	0.874762616	11.2554827	110820.0812	

Trucks	Sum of VMT*FE	21277728327
	Total VMT	2228362263
	Weighted Average FE (miles/gallon)	9.5486
Passenger Cars	Sum of VMT*FE	4.4267E+11
	Total VMT	16980950785
	Weighted Average FE (miles/gallon)	26.0686

Total VMT

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:38 AM

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	295.46	295.46	295.46	1,339,396	1,339,396
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	159.97	159.97	159.97	2,911,534	2,911,534
Total	455.43	455.43	455.43	4,250,930	4,250,930

	Annual VMT (miles)	Fuel Consumption	
Truck VMT	2,911,534	304,918	gallons per year
Passenger Car VMT	1,339,396	51,380	gallons per year
Total	4,250,930	356,297	gallons per year

Scenario 2 Project Operational Fuel Calculation

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>

EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Riverside (SC)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Calculations

VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel		VMT*FE
						Consumption	FE	
HHDT	Aggregated	Aggregated	GAS	9.98880317	229926.8053	61.15993723	3.759434946	864394.867
HHDT	Aggregated	Aggregated	DSL	26140.27083	1299849740	211707.9614	6.139824555	7980849354
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LDT2	Aggregated	Aggregated	DSL	899.7266747	14146533.68	432.6141314	32.70011923	462593337.9
LHDT1	Aggregated	Aggregated	GAS	24193.88471	292531383.4	21522.2472	13.59204644	3976100149
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MDV	Aggregated	Aggregated	GAS	216020.6112	3018517564	156155.571	19.33019453	58348531695
MDV	Aggregated	Aggregated	DSL	3144.465844	45103228.43	1903.622076	23.69337328	1068647627
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UBUS	Aggregated	Aggregated	GAS	146.2127201	6053134.018	1073.421016	5.639105188	34134259.44
UBUS	Aggregated	Aggregated	DSL	0.3117338	9845.875493	0.874762616	11.2554827	110820.0812

Trucks	Sum of VMT*FE	21277728327
	Total VMT	2228362263
	Weighted Average FE (miles/gallon)	9.5486
Passenger Cars	Sum of VMT*FE	4.4267E+11
	Total VMT	16980950785
	Weighted Average FE (miles/gallon)	26.0686

Total VMT

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:46 AM

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	462.00	462.00	462.00	1,712,815	1,712,815
Manufacturing	28.11	28.11	28.11	511,613	511,613
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	108.17	108.17	108.17	1,968,718	1,968,718
Total	598.28	598.28	598.28	4,193,146	4,193,146

	Annual VMT (miles)	Fuel Consumption	
Truck VMT	2,480,331	259,759	gallons per year
Passenger Car VMT	1,712,815	65,704	gallons per year
Total	4,193,146	325,463	gallons per year

Operation Natural Gas Use

Source: AQ/GHG Appendix, CalEEMod Output

Scenario 1

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:38 AM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

Natural Gas Use

General Office Building	54,194
Unrefrigerated Warehouse-Nc	502,416
Total	556,610 kBTU/yr

Scenario 2

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:46 AM

kBTU/yr = kilo-British Thermal Units/year

CF = cubic feet

Natural Gas Use

General Office Building	20,580
Manufacturing	1,975,720
Unrefrigerated Warehouse-Nc	356,437
Total	2,352,737

Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Scenario 1

Riverside Palmyrita Avenue Project S1 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:38 AM

Project Electricity Use

kWh/yr = kilowatt hours per year

	Electricity Use (kWh/yr)
Land Use	
General Office Building	145,202
Parking Lot	87,512
Unrefrigerated Warehouse-No Rail	579,903
Total	812,617 kWh/yr

Scenario 2

Riverside Palmyrita Avenue Project S2 - Riverside-South Coast County, Annual

Date: 10/21/2022 10:46 AM

Project Electricity Use

kWh/yr = kilowatt hours per year

	Electricity Use (kWh/yr)
Land Use	
General Office Building	55,140
Manufacturing	606,221
Parking Lot	85,225
Unrefrigerated Warehouse-No Rail	411,410
Total	1,157,996 kWh/yr

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 12'x60' single-wide unit (720 sq ft)

Construction Phase - Typical construction trailer for energy use estimates - estimates are included in the operational component of the results

Off-road Equipment - Zeroed out construction equipment

Trips and VMT -

Architectural Coating -

Vehicle Trips - Zeroed out off-site trips

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Consumer Products -

Area Coating - Appendix C

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Landscape Equipment -

Energy Use -

Water And Wastewater -

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	3.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
Appendix C				

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

		Highest	
--	--	---------	--

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.9400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	1.3053	1.3053	1.0000e-004	1.0000e-005	1.3121
Mobile	2.5200e-003	4.0000e-003	0.0257	6.0000e-005	6.4700e-003	5.0000e-005	6.5200e-003	1.7300e-003	5.0000e-005	1.7700e-003	0.0000	5.6364	5.6364	3.0000e-004	2.8000e-004	5.7282
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0406	0.4500	0.4906	4.2100e-003	1.0000e-004	0.6266
Total	5.4700e-003	4.1200e-003	0.0258	6.0000e-005	6.4700e-003	6.0000e-005	6.5300e-003	1.7300e-003	6.0000e-005	1.7800e-003	0.1766	7.3917	7.5683	0.0127	3.9000e-004	8.0038

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.9400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	1.3053	1.3053	1.0000e-004	1.0000e-005	1.3121
Mobile	2.5200e-003	4.0000e-003	0.0257	6.0000e-005	6.4700e-003	5.0000e-005	6.5200e-003	1.7300e-003	5.0000e-005	1.7700e-003	0.0000	5.6364	5.6364	3.0000e-004	2.8000e-004	5.7282
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0406	0.4500	0.4906	4.2100e-003	1.0000e-004	0.6266
Total	5.4700e-003	4.1200e-003	0.0258	6.0000e-005	6.4700e-003	6.0000e-005	6.5300e-003	1.7300e-003	6.0000e-005	1.7800e-003	0.1766	7.3917	7.5683	0.0127	3.9000e-004	8.0038

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/20/2023	11/24/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,080; Non-Residential Outdoor: 360; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3400e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.3400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.3400e-003	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.5200e-003	4.0000e-003	0.0257	6.0000e-005	6.4700e-003	5.0000e-005	6.5200e-003	1.7300e-003	5.0000e-005	1.7700e-003	0.0000	5.6364	5.6364	3.0000e-004	2.8000e-004	5.7282
Unmitigated	2.5200e-003	4.0000e-003	0.0257	6.0000e-005	6.4700e-003	5.0000e-005	6.5200e-003	1.7300e-003	5.0000e-005	1.7700e-003	0.0000	5.6364	5.6364	3.0000e-004	2.8000e-004	5.7282

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	7.01	1.59	0.50	17,101	17,101
Total	7.01	1.59	0.50	17,101	17,101

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.537845	0.056225	0.173186	0.138405	0.025906	0.007191	0.011447	0.018769	0.000611	0.000309	0.023821	0.001097	0.005189

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.1735	1.1735	1.0000e-004	1.0000e-005	1.1795
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.1735	1.1735	1.0000e-004	1.0000e-005	1.1795
NaturalGas Mitigated	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326
NaturalGas Unmitigated	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	2469.6	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326
Total		1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	2469.6	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326
Total		1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1318	0.1318	0.0000	0.0000	0.1326

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6616.8	1.1735	1.0000e-004	1.0000e-005	1.1795
Total		1.1735	1.0000e-004	1.0000e-005	1.1795

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6616.8	1.1735	1.0000e-004	1.0000e-005	1.1795
Total		1.1735	1.0000e-004	1.0000e-005	1.1795

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.9400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	2.9400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	2.9300e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	2.9300e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4906	4.2100e-003	1.0000e-004	0.6266
Unmitigated	0.4906	4.2100e-003	1.0000e-004	0.6266

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.127968 / 0.0784322	0.4906	4.2100e-003	1.0000e-004	0.6266
Total		0.4906	4.2100e-003	1.0000e-004	0.6266

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.127968 / 0.0784322	0.4906	4.2100e-003	1.0000e-004	0.6266
Total		0.4906	4.2100e-003	1.0000e-004	0.6266

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1360	8.0400e-003	0.0000	0.3369
Unmitigated	0.1360	8.0400e-003	0.0000	0.3369

Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0.67	0.1360	8.0400e-003	0.0000	0.3369
Total		0.1360	8.0400e-003	0.0000	0.3369

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0.67	0.1360	8.0400e-003	0.0000	0.3369
Total		0.1360	8.0400e-003	0.0000	0.3369

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Palmyrita Avenue Warehouse Project Construction Typical Construction Trailer - Riverside-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
